# Analysis of principles and contents of university curricula carried out at the Faculty of Forestry of H. Kollataj's University of Agriculture in Krakow Part 1. Structural changes of the Faculty of Forestry

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ARTICLE

#### Abstract

In this paper the author described and made analysis of structure of the Faculty of Forestry of the University of Agriculture in Krakow (Uniwersytet Rolniczy im. Hugona Kołłątaja w Krakowie, UR). The author showed the historical changes of structure over the last 2 decades and presented current situation of the Faculty will to the regard number and academic staff status. Furthermore the current international cooperation of the Faculty with reference to didactic activity was shortly reviewed.

Key words: structure, university, academic staff, forestry, Krakow, Poland

#### Streszczenie

Uniwersytet Rolniczy im. Hugona Kołłątaja w Krakowie (UR) zatrudnia obecnie (30.XI. 2011) 1420 osób, w tym 760 nauczycieli akademickich. W grupie nauczycieli jest zatrudnionych 117 profesorów tytularnych 50 profesorów nadzwyczajnych UR oraz 63 adiunktów ze stopniem dr habilitowanego. Uniwersytet kształci ok. 13 tysięcy studentów i oferuje 18 kierunków i 45 specjalności. Wydział Leśny jest miejscem nauki dla ok. 1200 studentów, z tego 60% studiuje na studiach stacjonarnych, a reszta na studiach niestacjonarnych. Studenci studiów II stopnia stanowią ok. 15% ogółu studentów Wydziału. Wydział Leśny prowadzi jeden kierunek studiów - Leśnictwo. Studia leśne w Krakowie mają długą tradycję i wywodzą się z Uniwersytetu Jagiellońskiego, gdzie istniejąca w ramach Wydziału Filozoficznego Sekcja Leśna, w dniu 27 września 1949 r., została przekształcona w samodzielny Wydział Leśny. Na progu wielkich przemian społeczno-ekonomicznych (grudzień 1989) Wydział Leśny w Krakowie składał się z 13 jednostek naukowo-dydaktycznych, tj. 6 Katedr i 7 Zakładów wyszczególnionych w tekście pracy (Wojciechowski 2002; Starzyk i in. 2009): Dekadę później działalność naukowa i dydaktyczna Wydziału prowadzona była w 16 jednostkach (9 katedr i 7 zakładów) (Anon. 1997, Gil 1999). zaś obecnie działalność naukowa i dydaktyczna Wydziału prowadzona jest w 12 jednostkach (1 Instytut z 3 Zakładami i 11 Katedr). Według aktualnego stanu Wydział Leśny UR w Krakowie zatrudnia 138 pracowników, w tym 96 nauczycieli akademickich, z tego: 15 profesorów tytularnych, 5 profesorów nadzwyczajnych UR oraz 11 adiunktów ze stopniem dr hab. Wydział aktywnie współpracuje, w ramach programów międzynarodowych, z 18 uniwersytetami z Unii Europejskiej i uczestniczy wraz z 5 innymi uczelniami z UE w konsorcjum realizującym w ciągu 3 lat (2011-2013) corocznie 2 tygodniowy intensywny kurs dla 36 studentów, po 6 osób z każdego kraju, w ramach programu Erasmus (the IP Course ERASMUS) zatytułowany "Wyzwania społeczno-ekonomiczne w leśnictwie europejskim".

#### 1. Preface

University of Agriculture in Krakow (Uniwersytet Rolniczy im. Hugona Kołłataja w Krakowie, UR) employs at present (as of Nov. 30th 2011) 1420 persons and out of this number the academic staff comprises 760 persons. In a group of university teachers one can find 117 full professors (so called "titular professors") and from that number 64 persons hold a position of ordinarius professors and the balance (53) - extraordinarius professors. Apart from that university employs 50 extraordinarius professors of University of Agriculture and 63 associate professors with a degree of dr hab. The Vniversity consists of 7 Faculties and 2 Interdepartmental Programmes. Those are as follows: Faculty of Economics and Agriculture (Wydział Rolniczo-Ekonomiczny), Faculty of Forestry (Wydział Leśny), Faculty of Animal Sciences (Wydzial Hodowli i Biologii Zwierzat), Faculty of Environmental Engineering and Land Surveying (Wydział Inżynierii Środowiska i Geodezji), Faculty of Horticulture (Wydział Ogrodniczy), Faculty of Production and Power Engineering (Wydział Inżynierii Produkcji i Energetyki), Faculty of Food Technology (Wydział Technologii Żywności), and Biotechnology - Interdepartmental Studies (Studia Miedzywydziałowe Biotechnologia) as well as Landscape Architecture - Interdepartmental Programme (Studia Miedzywydziałlowe Architektura Krajobrazu). University educates circa 13 thousand students and offers 18 fields of study (majors) and 45 specializations. Students can also choose from among 32 categories of postgraduate study programs.

The Faculty of Forestry is a place of study for circa 1200 students and 60% of that number are full-time and the remaining are part-time students. Graduate students (2 cycle program) represent 15% of the total amount of Faculty students. The number of the University students increased over the last 13 years by 40% and those of the Forestry Faculty by 25% (Gil 1998).

#### 2. Basic information on University of Agriculture in Krakow

#### 2.1 Foundation and legal status

The Cracow's Academy project of reform worked out by Hugon Kollataj and approved in 1780 by the Commission of National Education provided establishing the Chair of Agriculture in its structure. That Chair was formed at the Faculty of Philosophy in 1806 and was active for no more than 3 years.

Continuity of agricultural academic studies in Krakow is connected with foundation (in 1890) of the Agricultural School of 3 year duration at the Faculty of Philosophy of Jagiellonian University. In 1892 prof. Emil Godlewski was appointed the Director of the School and he held that position for 16 years. In 1911 the Agricultural School was given the building located at 21 Mickiewicza as its seat. Nowadays it houses the Godlewski's Collegium. In 1923 the School was changed into self-governing Faculty of Agriculture.

After the II World War the Faculty of Agriculture resumed its activity, changing its name in 1946 into the Faculty of Agriculture and Forestry. Three years later in structure of Jagiellonian University there were created two autonomous faculties: the Faculty of Agriculture and the Faculty of Forestry.

As a result of reorganization of higher education system, those two faculties served as the basis for creating the Higher Agricultural School (Wyzsza Szkola Rolnicza, WSR) in Krakow, which was founded in 1953. In accordance with the decision of the Council of Ministers beginning in October 1972 the Higher Agricultural School acquired the status of the Academy of Agriculture (Akademia Rolnicza, AR).

In 1978 the Academy of Agriculture was named after Hugon Kollataj and changed its name into the Hugon Kollataj's Academy of Agriculture (Akademia Rolnicza im. Hugona Kollataja w Krakowie).

Since April 11th 2008 the current Academy of Agriculture has held the status of university and name of the Hugon Kollataj's Uniwersity of Agriculture in Krakow.

The Hugon Kollataj's University of Agriculture in Krakow is a state owned higher school acting on the basis of the rules of the Act dated of 27 July 2005 "Law on higher education". Current activity of the University is regulated by the Statute and law of lower rank (Rector's ordinance). The University is a legal entity and on the outside is represented by the Rector (Starzyk i in. 2009).

# 3. Introduction to the Faculty of Forestry

# 3.1 Foundation of the Faculty, the rights of the Faculty

The Faculty of Forestry offers only one field of studies (major) - Forestry. Forest studies in Krakow have had a long tradition. Regular lectures in forest sciences have been carried out since 1890 within the scope of the Agricultural School at the Faculty of Philosophy of Jagiellonian University. In 1919 the Autonomous Chair of Forestry was created for needs of that School. The Chair was organized and led by Stanisław Sokołowski, outstanding forester, professor of Higher Forest School in Lviv, who arrived for this purpose to Krakow.

However, only after the II World War one can observe increased activity in forest sciences in Krakow. It happened to great extent on account of dramatic fates of employees of the Higher Forest School in Lviv, who were forced to abandon Lviv and to seek refuge outside its boundaries. Many found it in Krakow. Prof. dr Dezydery Szymkiewicz was indefatigable organizer of those forest studies, unusual man, exceptionally honest one, a real friend and protector of young people. It was his initiative to start in 1945 the Higher Forest Courses at Forest Research Institute in Krakow on the basis of which, in October 1946, there was established the Forest Section within the scope of the Faculty of Agriculture of Jagiellonian University (UJ). That Faculty changed into the Faculty of Agriculture and Forestry with two sections: agricultural and forest ones. On the basis of Minister of Education Order of 27 Sept. 1949, the Forest section was converted into autonomous Faculty of Forestry. Prof. dr hab. Tadeusz Gieruszyński was the first dean. Dynamically acting Faculty was unfortunately put into liquidation, in 1951 which was associated with suspending of students' enrolment on the first year of study. The didactic process was continued with students of higher years of study. The Faculty was finally closed down in 1954. The reasons of that decision have not been explained until today. In 1963, after 9 years of absence on the map of higher schools of Krakow, the Faculty of Forestry was reactivated within the scope of Higher Agricultural School (WSR) and received as its seat the building at the address of St. Marek Street 37. Since 1982 seat of the Faculty has been located in the building situated at the address of al. 29 Listopada 46.

The Faculty of Forestry within the date of its reactivation had the full academic powers, i.e, of conferring degree of dr. hab. in the field of forest sciences in major forestry. It also meant that it had the power to conduct a procedure leading to confer a title of professor. It is worth underlining that as early as in 1965 the procedure on conferring the title of professor on two persons was terminated and two other persons received the degree of doctor.

The above mentioned powers the Faculty has incessantly with the exception for a very short period in 1990s, when in situation of unexpected death of several professors, the habilitation rights were suspended (Orzeł i in. 2009).

# 3.2 Organizational structure of the Faculty (as of Oct. 1st, 2011)

## 3.2.1 Historical review of changes in organizational structure

On threshold of the great social and economical changes (Dec. 1989) the Faculty of Forestry consisted of 13 scientific and didactic units i.e. 6 chairs and 7 research and didactic units; as specified in table 1 (Wojciechowski 2002; Starzyk i in. 2009)

A decade later (1998) the number of research and didactic units increased to 16 (tab. 2) and the Faculty of Forestry employed 88 academic teachers and 62 engineering and technical staff and educated 900 students (Anon. 1997, Gil 1999).

And yet again a decade later the Faculty activity was conducted in 15 units (13 chairs and 2 didactic and research units, Jan. 31<sup>st</sup>, 2009) as indicated in tab.3 (Orzel i in. 2009).

Names of particular units contain general information on the scope of didactic and research activity carried out. The Statute of University specifies in details the conditions required to appoint a unit. The qualifications of academic staff employed in the unit are decisive factor for a unit to be appointed as a chair or a didactic and research unit. As can be seen in tab. 3 the number of chairs increased decidedly in comparison to 1989 from 6 to 13 in 2009, which proves that a position, in sense of scientific qualifications of academic staff, was strengthened.

# 3.2.2 The present state of organization structure of the Faculty of Forestry (as of Nov. $30^{th}$ 2011)

According to the present state, the Faculty of Forestry of University of Agriculture in Krakow employs 138 persons, including 96 academic teachers and out of that 15 titular, full professors, 5 extraordinarius professors of University of Agriculture, 11 associate professors with dr hab. degree and 51 associate professors with dr degree (tab.4).

Nowadays, the research and didactic activity of the Faculty is executed in 12 units (1 Institute with 3 didactic and research units and 11 chairs). The details are specified in tab.5.

Heads of 12 specified units are titular professors. Within the scope of Chair of Genetics, Forest Trees Breeding and Forest Nursery, Chair of Forest Protection, Entomology and Forest Climatology, Chair of Silviculture, and Didactic and research unit of Zoology and Wildlife Management there are active experimental and research stations to be found in the field respectively: Didactic and Research Station in Krynica, Phytoclimatic Research Station in Krynica, Experimental Station in Krynica, and Carpathian Research Station at Krempna-Roztajno.

The Faculty of Forestry in Krakow is increasingly active in the field of international didactic cooperation. The Faculty signed the Erasmus bilateral agreements with 18 European Universities and 3 other agreements (Madrid and Cordoba, Spain and Padowa, Iltaly) are in progress (tab. 6). The Faculty sends students and academic teachers to various EU countries and also accepts students from those countries. Since 2010 the Faculty has been participating in Consortium of 6 European Universities connected with LLP Erasmus Program. That agreement on the IP Course ERASMUS entitled "Socio-economic Challenges in European Forestry" was signed in 2010 for 3 years (2011-2013). The first edition took place in Finland (Rovaniemi, 2011) the second will take place in Czech Republic (Brno, 2012) and the third one will be held in Poland (Krakow, 2013). Duration of IP Course is 2 weeks and 36 students participate in it, 6 from each member university as well as professors from Consortium followers (tab.7).

There are also 93 courses in English offered by the University of Agriculture in Krakow for future foreign LLP Erasmus users, of which 15 (58 ECTS) is an offer of the Faculty of Forestry listed in table 8.

Apart from that, the Dean of the Faculty and the Vice-Dean for Student Affairs have been permanent members of the Conference of the Deans and Directors of European Forestry Faculties and Schools (ConDDEFFS) since the beginning of that event (Madrid 2009) and very actively try to get contacts with other forest-oriented universities to broaden the didactic offer for Faculty students.

#### 4. Conclusions

The constant development of academic staff qualifications and activity is clearly visible over the last 2 decades. The Forest Faculty from Krakow try to work actively in cooperation with forestry institutions from Warsaw and Poznan to strengthen its structure and adjust it to the present needs of forest sciences. Efforts for broadening the didactic offer for our students, also in foreign languages,

confirm that for our Faculty of Forestry the opportunities and chances of our forest students on competitive market in Poland and in Europe are very important.

Tab.1. Departments of the Faculty of Forestry of the Agricultural University in Krakow in 1989

1. Chair of Forest Entomology
2. Chair of of Forest Trees Breeding, Nursery and Selection of Forest Trees
3. Chair of Forest and Wood Utilization
4. Chair of Forest Management
5. Chair of Forest Pathology
6. Chair of Silviculture
7. Didactic and research unit of Forest Botany and Nature Conservation
8. Didactic and research unit of Forest Ecology
9. Didactic and research unit of Forest Engineering
10. Didactic and research unit of Forest Mensuration
11. Didactic and research unit of Forest Protection and Wildlife Management
12. Didactic and research unit of Political Sciences and Philosophy
13. Didactic and research unit of Mechanisation of Forestry

Tab.2. Departments of the Faculty of Forestry of the Agricultural University in Krakow in 1998

1. Chair of Forest Botany and Nature Conservation
2. Chair of Forest Ecology
3. Chair of Forest Entomology
4. Chair of Forest Pathology
5. Chair of Silviculture and Forest Tree Physiology
6. Chair of Forest Management
7. Didactic and research unit of Forest Mensuration
8. Didactic and research unit of the Philosophy of Nature and Country Culture
9. Chair of Forest Soil Science
10. Didactic and research unit of Forest Engineering
11. Didactic and research unit of Forest Climatology
12. Didactic and research unit of Mechanisation of Forest Works
13. Didactic and research unit of Forest Trees Breeding, Nursery and Selection of Forest Trees
14. Didactic and research unit of Forest Protection
15. Didactic and research unit of Forest and Wood Utilization
16. Didactic and research unit of Zoology and Wildlife Management

Tab.3. Departments of the Faculty of Forestry of the Agricultural University in Krakow in 2009

1. Chair of Forest Botany and Nature Conservation	
2. Chair of Forest Ecology	
3. Chair of Forest Engineering	
4. Chair of Forest Entomology	
5. Chair of Forest Trees Breeding, Nursery and Selection of Forest Trees	
6. Chair of Forest and Wood Utilization	
7. Chair of Mechanization of Forest Works	
8. Chair of Forest Mensuration	
9. Chair of Forest Management	
10. Chair of Forest Pathology	
11. Chair of Forest Protection and Forest Climatology	
12. Chair of Silviculture	
13. Chair of Forest Soils	
14. Didactic and research unit of Forest Zoology and Wildlife Management	
15. Didactic and research unit of Nature Philosophy and History of Regional Culture	

Tab. 4. Employment structure on the faculty of Forestry of the University of Agriculture in Krakow (as of Nov  $30^{th} 2011$ )

Position		Total	
Professor ordinarius, titular (profesor zwyczajny, z tytułem)	11		
Professor extraordinarius, titular (profesor nadzwyczajny, z tytułem)	4		
Professor extraordinarius of UA (profesor nadzwyczajny UR)	5		
Associate professor with dr. hab. degree (adiunkt ze stopniem dr hab.)	11		
Asistant professor with dr. degree (adiunkt ze stopniem dr)	51		
Senior lecturer with dr degree (starszy wykładowca ze stopniem dr)	3		
Asistant with dr degree (asystent ze stopniem dr)	10		
Asistant with MSc. degree (asystent ze stopniem mgr)	1		
Technical staff (including 27 persons on full-time job)		35	
Administrative personnel		7	
Total	96	42	138

Tab.5. Chairs and didactic and research units of the Faculty of Forestry of the Agricultural University in Krakow in 2011

- 1. Institute of Forest Biodiversity (Didactic and research unit of Forest Botany and Nature Conservation, Didactic and research unit Zoology and Wildlife Management, Didactic and research unit of Nature Philosophy) 2. Chair of Forest Ecology 3. Chair of Forest Engineering 4. Chair of Genetics, Forest Trees Breeding and Forest Nursery Chair of Forest and Wood Utilization 5. 6. Chair of Mechanisation of Forest Works 7. Chair of Forest Mensuration 8. Chair of Forest Management Chair of Forest Pathology 10. Chair of Forest Protection, Entomology and Forest Climatology 11. Chair of Silviculture
  - 12. Chair of Forest Soils

Tab.6. List of European universities which signed bilateral agreements with the Faculty of Forestry in Krakow on LLP Erasmus Program cooperation

1. Universität für Bodenkultur (BOKU), Vienna, Austria 2. Czech University of Life Sciences, Prague, Czech Republic 3. Mendel University of Agriculture and Forestry in Brno, Czech Republic 4. Technische Universität Dresden, Germany 5. Albert-Ludwigs University of Freiburg Breisgau, Germany 6. Georg-August University of Göttingen, Germany 7. Technische Universität München, Germany 8. University of Applied Forest Sciences Rottenburg, Germany 9. University of Helsinki, Finland 10. University of Joensuu, Finland 11. Rovaniemi University of Applied Sciences, Rovaniemi, Finland 12. Mid Sweden University, Sundsvall, Sweden 13. Norwegian University of Science & Technology, Trondheim, Norway 14. University of Ljubljana, Biotechnical Faculty, Slovenia 15. Universida Catolica "Santa Teresa de Jesus" de Avila, Spain 16. Universidad Politecnica de Madrid, Spain 17. Universidad Politecnica de Valencia, Spain 18. Universita degli Studi di Bari, Italy Source: author's data based on documents of the Faculty of Forestry of the University of Agriculture in Krakow, Poland Tab. 7. Member universities of the Consortium of European Universities created for the IP Course Erasmus entitled Socio-economic Challenges in European Forestry

- Rovaniemi University of Applied Sciences, Finland
- Tampere University of Applied Sciences, Finland
- Umea Technical University, Sweden
- Mendel University in Brno, Czech Republic
- Inverness College, Great Britain
- University of Agriculture, Krakow, Poland

Source: author's data based on documents of the Faculty of Forestry of the University of Agriculture in Krakow, Poland

Tab. 8. Courses in English (FORESTRY) offered to LLP Erasmus students in academic years 2009/2010- 2011/2012 by the Faculty of Forestry in Krakow

Course name	ECTS
1. Anthropogenic Effect on Forest Stand and Waters	4
2. Introduction to Geomatics	4
3. Contemporary Approaches in Conservation of Forest Biodiversity	4
4. Ecology of Invasive Plants	4
5. Geomatics - Remote Sensing	4
6. Geomatics - Digital Photogrammetry	4
7. Geomatics - GNSS Global Navigation Satellite Systems	4
8. Close to Nature Silviculture	4
9. Management of Mountain Uneven - aged Forests	4
10. Marketing Management of Forest Products and Services	4
11. The Outline of Applied Silviculture in North America	2
12. Population Ecology of Tress	4
13. Reclamation and Ecology of Post-mining and Post-industrial Sites	4
14. Soil Enzymology	4
15. Transport Operations in Forestry	4
Total	58

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