THE UNIVERSITY OF AGRICULTURAL SCIENCES
AND VETERINARY MEDICINE IAŞI
Faculty of Veterinary Medicine

Self Evaluation Report

2010

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INTRODUCTION

In a protest of the Dean of the Faculty of Sciences of the Alexandru Ioan Cuza University of Iasi, from 31 October 1913, mentioned in the State archives are consemnate the following:

«At the beginning of the 20th century there functioned within the Faculty of Sciences of Iasi a Department of Agriculture, similar to the Department of Agricultural Chemistry set up at the Faculty of Sciences from Bucharest. In 1910, within this department the subjects taught were the following: Nutrition of plants and agricultural animals, Wine processing and Dairy. On the 7th of June 1911, a group of teachers together with Haralamb Vasiliu – the holder of the Department of Agricultural Chemistry P. Bujor, A. Popovici, and I. Simionescu proposed the founding of a Section of Agricultural Sciences within the Faculty of Sciences.

The courses were distributed along two years and in three groups. From the 17th of May 1913, the section of Agricultural Sciences had its own regulation of functioning, but at about the same year, they were on the verge of losing a post of reader at animal husbandry, another at rural economy as well as a post of reader at veterinary medicine, posts suppressed »because of exceptional and unfavourable circumstances in which the country was». (The State Archives of Bucharest, Fond.Min.Instr.Dos.2681/1913, f.189).

Although these documents prove that there have been veterinary practices within the university even from the beginning of the 20th century, it took almost six decades till this desideratum came true.

The **Faculty of Veterinary Medicine** was set up in 1961, being provided with highly modern technology where outstanding personalities of Romanian veterinary higher education could unfold their activities.

Till 1974, the faculty functioned as an individual unit within the Agronomic Institute of Iași, the courses lasted 5 years and the disciplines were structured in 4 departments.

In 1974, it was united with the Faculty of Animal Husbandry and is transformed in the section of Veterinary Medicine within the Faculty of Animal Husbandry and Veterinary Medicine.

In 1986, after a new organization, the faculty is found within the Faculty of Agriculture with the name of Department of Veterinary Medicine.

Starting with 1990, the Faculty gains its natural name of Faculty of Veterinary Medicine, organized on the principles of modern veterinary education, within the University of Agricultural Sciences and Veterinary Medicine.

An important role in the process of European integration was the receiving of the Faculty as member with full rights in the **European Association of Establishments for Veterinary Education** - **EAEVE** in 1997, as well as the affiliation to the European Credit Transfer and Accumulation System (ECTS) in 1998.

In 2001, the University Veterinary Medicine Research Centre was set up and accredited, being re-accredited in 2006 by CNCSIS and which contributed to the continuous improvement and focussing of the research activity.

Bringing up to date the study programmes according to the E.U. Directives 78-1026, 78-1027 and 36/2005 was accomplished starting with 2004-2005 academic year and is periodically updated according to the requirements of the labour market.

The existence from the beginning of modern technologies at that time, as well as their continuous improvement made the didactic process of high quality. The quality of the educational process is also revealed both by the professional training of the veterinarians and by publishing treatises, monographs, books or guides for practical courses.

The faculty has labs, clinics, amphitheatres and hospitalization areas, used in theoretical and practical training of the students. For the same reason, there is a permanent collaboration with different veterinary units from the Moldova region and other areas of the country.

For high quality student training, the faculty initiates and coordinates different programmes such as Tempus-Phare, Socrates-Erasmus, Leonardo da Vinci.

The Faculty of Veterinary Medicine has a library with numerous new books, which is at hand of the students and teaching staff.

At the moment, the studies last 6 years and at the end of the courses they are offered the Doctor of Veterinary Medicine degree.

Since 2006, the graduates are offered a Diploma Supplement in English.

The bilateral collaboration agreements between the faculty and other faculties and research institutes from Europe, America and Africa ensures the possibility of improvement for the professors and students: Ecole Nationale Vétérinaire D'Alfort , Angers University, INSERM CF, Nantes University, Institute Superior d'Agriculture–Lille, (France), Institute of Microbiology Munster Nordwestfallen (Germany), University of Veterinary Medicine of Vienna, Liège University (Belgium), Purdue University (USA), Liverpool University (UK), Firat University (Turkey), Benha University (Egypt), Mansoura University (Egypt), Technical University of Lisbon (Portugal), State Agrarian University of Chisinau, Zoology Institute of the Academia (Moldova Republic), Milano University, Technical University of Napoli, Bologna University (Italy).

In 2003, there took place in Iasi the 12th reunion of the veterinarians organized through the Phare Programme Ro 00/IB/OT 01 – "Mutual Acknowledgement of Professional Qualifications", followed by meetings that continued along two years in order to harmonize the teaching curricula of the four Romanian faculties with the European requirements.

CHAPTER 1
OBJECTIVES

1.1. Factual informations

The main objective of the Faculty of Veterinary Medicine id to provide adequate research-based veterinary training, which ensures the graduates the knowledge needed for practicing as veterinary surgeons just after graduation, according to the EU Directive 2005/36CEE, and having the possibility of life-long learning – according to the Lisbon treaty.

The faculty takes part in the competitions of the Frame-programme of research-development-innovation scheduled by the Research Strategy of Romania. There are projects of scientific research that were won by contest, so we are involved in continuous training done by the already trained research teams of professors, students or graduates in national research consortia.

The objectives of the all activities carried on by the employees of the FVM, by the managerial teams of FVM and UASVM Iasi is to cover the necessities of the labour force in the field of veterinary medicine from Romania and EU, through the training of general veterinary surgeons.

The Managerial Programme is annually reviewed, approved by the Professoral Council and discussed in the Annual Meeting with all didactic and non-didactic personnel, when the Dean present The Annual Report of Activity and propose the new Operational Plan from next year. In the end, the University's Rector have to approve all these documents, and posted on the website .

The modernization of the curriculum and its harmonization regarding the content of the subjects (courses, seminars), according to the request of Bologna Treaty – 2005.

The educational system on transferable credits which is implemented to all the years of study, will be perfected through periodical checking decided by the deanery, through involving the students in the new education system according to the Regulation for the didactic activity and Regulation for quality approved by the Senate of UASVM Iasi.

The didactic activity will be perfected through the improvement of the clinical education, equipping of the triage, modernizing the clinics and equipping the labs with the machines necessary for doing researches of European level.

The most efficient organization of the practices of the education plans under conditions of veterinary sanitarian network, diagnosis labs, particular clinics and animal farms, of the lab for food safety, through the cooperation with specialized local or regional organisms, with the National Sanitary veterinary Authority and for food safety (ANSVSA).

The main objectives of the Faculty either have a didactic character or are oriented to university research:

- Activities of the Faculty for meeting the EAEVE requirements and for the evaluation in November 2010.
- The educational system based on transferable credits which is implemented in all years of study, will be perfected by periodical check-ups scheduled by the Dean's, and by involving the students in the new educational system according to the Regulations regarding the didactic activity and the Regulations of quality assurance, both approved by the Senate of UASVM Iasi.
- We have in view to attract at FVM Iasi foreign students to studies.
- We will organize the practical activities of the curriculum most efficiently, under the conditions of the sanitary-veterinary network, of diagnosis laboratories, of private clinics and animal farms, of laboratories of food safety.
- We will try to stimulate the academic staff who unfold research activities as these very activities will be the main criteria for awarding the merit bonus and for promoting; thus, besides the involvement of the teams, a continuous self-evaluation of the teaching staff will be made.
- The didactic activity will be perfected by improving the clinical education, equipping the triage and laboratories for researches on European level.
- The coordination system of certain programmes such as Tempus-Phare, Socrates/Erasmus, Leonardo da Vinci, will be improved in order to align the university training to the European requirements.
- We will continue our collaboration with Ecole Nationale Veterinaire d'Alfort, France, which was initiated for the period 2002-2007 but which also continued in 2008.
- We will develop common projects of clinical, pre-clinical and ichthyo-pathological research with Purdue University – USA, Benha University Egypt, as we have already signed a trilateral collaboration agreement for the attraction of young researchers and PhD students, and for research at imposed standards.
- On the basis of the bilateral and multilateral collaborations with education institutions from abroad, we will develop master studies within the European doctoral programmes, We shall also increase the international mobility of the students and the academic staff, permanently updating the teaching level.
- The activity of the University Centre of Veterinary Medical Research will be improved by the elaboration of certain research-development-innovation themes based on supply and demand system, in direct relation to the economic domain and for supervising the animal and public health, expanding the material and information basis with the involvement of both PhD students and newly graduates in the informative integration.
- We will have in view the practical application of the research activity by setting up Romanian research consortia with different specialists by European frame-

programmes as well as by organizing scientific meetings with international participation.

- We will have to create and apply 3D courses for better understanding the educational process
- We will propose research projects for international financing within the 7th Frame Programme of the European Union, programmes of international university partnership and research projects financed by the structural funds of the EU.

1.2. Commentaries

All the proposals of institutional development set through the Managerial Programme (Annual operational plans and Report of activity) are approved by the Faculty Council by vote and put to practice by the Board of the Faculty Council, which is made up of the dean, vice-dean, scientific secretary, chiefs of departments and a student.

The commissions on domains of the Faculty council are formed with the teaching staff and the students that are members of the Faculty Council with abilities in the domain of the commission and with collaboration availability. They propose specific activities and monitor the periodical accomplishments.

The professional activity will have as main and continuous objective the development of the practical component of the education process through the implementation of a base of adequate materials and through the institution of an operative system of collaboration with farms, factories of processing food products of animal origin and diagnosis labs.

1.3. Suggestions

Ensuring a number of the teaching staff large enough to accommodate the programme of professional training for the students especially by occupying through contest the posts of assistant and reader.

Through the organizational structure, a programme of monitoring and control of the quality of the training programme of the teaching staff is set.

Including in the organizational structure of the faculty, besides the trainers and students, of a larger number of persons that work in the domain (in 2009-2010 academic year, three vets that work in veterinary labs were brought to teach).

Setting up an information feed-back system with some customers for collateral appreciation regarding the veterinary services offered.

CHAPTER 2

ORGANIZATION

The Faculty of Veterinary Medicine Iasi is part of "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine, a specialized state-financed institution of higher education that has the mission of training specialists in the agricultural and veterinary medicine domains and permanent updating of their knowledge.

University management:

1. RECTOR PhD. Prof. Gerard Jităreanu
1. VICE RECTOR (DIDACTIC ACTIVITY)
2. PhD. Prof. Vasile Vântu
3. VICE RECTOR (ADMINISTRATIVE AND ECONOMIC ACTIVITIES)
4. PhD. Prof. Paul Corneliu Boişteanu
5. VICE RECTOR (STUDENT ACTIVITIES)
6. PhD. Prof. Gheorghe Savuţa
7. VICE RECTOR (SCIENTIFIC ACTIVITY)
8. PhD. Prof. Valeriu Vasile Cotea
9. GENERAL CHANCELLOR
10. PhD. Prof. Daniel Bucur
11. ADMINISTRATIVE MANAGER
12. Eng. Adrian Neagu

The academic structure of the university consists of four faculties: Faculty of Agriculture, Faculty of Horticulture, Faculty of Animal Husbandry, Faculty of Veterinary Medicine.

STRUCTURE OF THE FACULTY
General information
Evaluated institution: Faculty of Veterinary Medicine Iaşi
Address: Aleea Mihail Sadoveanu, nr.8, Iaşi 700489, Romania.
Tel/ Fax: 0232/219113.
http://www.univagro-iasi.ro/medicina/
Dean: PhD. Prof. Oprean Octavian Zaharie

ADMINISTRATIVE STRUCTURE OF THE FACULTY

Faculty of Veterinary Medicine:
DEAN
PhD. Prof. Octavian Zaharie Oprean
VICE DEAN
PhD. Prof. Liviu Miron
SCIENTIFIC SECRETARY
PhD. Prof. Gheorghe Solcan

From the administrative point of view, FVM Iasi is organized in 3 departments:
Department VIII-Pre-clinics

- Department IX- Clinics
- Department X- Animal productions and public health.

The entire activity of FVM Iasi is led by the Council of the Faculty with its 17 members (12 of the academic staff and 5 students).

The leading board of the Council of the Faculty consists of: dean, vice dean, chancellor and students' representative.

In 2009-2010 academic year the faculty has the following academic staff:

Total academic staff = Of which:	41
Professor	10
Reader	12
Lecturer	12
Assistant	7

Associate professors : 5

In the faculty the following **curriculums** are present:

Cycle I

- Veterinary medicine – licence education (for 6 years).

Cycle II

- Master with 4 specializations:

-Veterinary clinics and therapy, daily courses, 1.5 years.
- Sanitary-veterinary epidemiology and legislation, daily courses, 1.5 years.
-Inspection and control of animal origin products, daily courses, 1.5 years
-Laboratory diagnosis daily courses, 1.5 years.

Cycle III

- Doctorate with 11 specializations and 19 Doctorate coordinators:

- Normal and pathological morphology
-Microbiology -Immunology
-Surgical pathology
-Parasitic diseases
-Zoohygiene
- Veterinary obstetrics and andrology
-Infectious diseases
- Sanitary veterinary technology and expertise
- Medical semiology and pathology
-Pharmacology and toxicology
- Normal and pathologic physiology

In the veterinary medicine domain there are enrolled **127** PhD students, of which 34 are with doctoral burses.

Also, there is a form of

- Postgraduate education of short period (1-3 months/ with fee).

Suggestions to the chapter "OBJECTIVES"**:**

1. Ensuring an adequate number of academic staff for the professional training of the students, especially by occupying of the vacant posts of assistant and lecturer by contest.
2. Continuing the monitoring and controlling programme of the quality of the academic staff's training.
3. Besides trainers and students, there will be included in the organizational structure of the faculty, a larger number of vet practitioners (in 2009-2010 academic year, 5 veterinary surgeons working in sanitary-veterinary laboratories and for food safety were included in the didactic system of the Cycle II)
4. Having an informational feed-back system from certain customers for collateral appreciations on the offered veterinary services.

Conclusions

1. There are improvement processes of the organization structure of the faculty which should be applied.
2. The system of professional training can be perfected in order to meet the requirements of the Directive 2005/36/ EU
3. Persons outside the academic community can be involved in the educational system in order to ensure a better communication with the veterinary domain.

CHAPTER 3
FINANCE

3.1. Factual information
3.1.1. General information

According to the Law of Higher Education, Law regarding the Statute of the Teaching Staff and University Charter, the budget of our university is made up of:

- funds allocated by the state through the Ministry of Education, Research, Youth and Sport in order to provide salaries, educational process and investments.
- funds drawn by the University and its Faculties, representing the extra-budget funds.

As for the funds from the budget, the Ministry of Education, Research, Youth and Sport allocate them for the entire University, according to the number of students, budgeted on the quality indicators. The university redistributes these funds to each faculty in accordance with the number of budgeted students from each form of education (licence, master or PhD).

In 2009, our university had 861 budgeted students.

For an allocation of 7316.43 RON per student, the faculty received 6302080 RON.

Of these funds, the University detains 30% for organizing activities at academic level for the benefit of all the faculties (maintenance, payment of the non-didactic staff etc).

The budgeted funds allocated to the veterinary training are higher in comparison with the other forms of training within the University. This is the result of a legal stipulation for education, which states that each student of higher medical training will have the 2.25 coefficient, in comparison with 1.75 allocated to the other specializations (Agriculture, Horticulture, Animal Husbandry) within the university.

There is no methodology for allocating these funds within our university and as a consequence this is coordinated according to the needs of the departments.

The finance for equipment purchasing is done in two ways:

-funds allocated from the University central budget;

-money resulted from the grants and research activities with third parties or other faculty income.

The investments are financed by the Ministry of Education, Research, Youth and Sport at the request of the University.

The decisions for the improvement and maintenance of the buildings are made on the University level and transmited in order to be executed by the specialty departments of the university.

Each year, the University together with the faculties set the plan for investments, funds for general and ordinary repairing, as well as the funds for purchasing equipment and components of the Operational and Strategic Plans.

All the decisions regarding the organization and use of funds are taken at the faculty level, but the Senate of the University approves the final decisions and spending of the funds.

3.1.1. Information on the supplimentary income

The income obtained from the activity of the clinics, analyses for different beneficiaries (farms, animal processing factories etc) are at the faculty's disposal in proportion of 70%. The University of Agricultural Sciences and Veterinary Medicine, as general administrator, raises 30% of the sum that is redistributed according to the necessities of the entire university.

20% are retained on the university level from the research activity income.

In order to satisfy the demand on the labour market, since 2002/2003 the Faculty of Veterinary Medicine has offered positions with fee for students of all cycles of training. For this form of study, the students pay a fee in RON, in 4 tranches during one academic year. In 2009, the fee for the students attending the licence cycle was of 2900 RON.

According to the decision of the Senate, during the training process, all students, regardless the educational cycle, should pay fees for various services, as follows:

Enrolment fee 50 RON
Re-enrolment fee 250 RON
Re-examination fee 15-50 RON

The funds that come from these fees are used according to the decisions, 70% by the faculty and 30% by the University. These funds are used to pay salaries (payment per hour of teaching) where needed, and expenditure for the educational process.

3.2. Budget of income and expenditure

All information on the budget of income and expenditure of our faculty refer to 2009 (tables 3.2.1 and 3.2.2.)

The quantum of income and expenditure is in Euro* and our national currency (RON).

Table 3.2.1. Annual income of the Faculty of Veterinary Medicine (2009)

Income category	National Currency (RON)	Euro
a. income from the state or public authorities for education	6,302,080.000	1,575,520.000
b. income from the state or public authorities for investments/ rehabilitations	1,015,999.000	253,999.750
c. income from private persons	-	-
d. income from research	995,030.000	248,757.500
e. income obtained by the institution	956,201.408	239,050.353
e1. income from student fees	*1,231,334.540*	*307,933.635*
e2. income from fees in foreign currency	*162,100.000*	*40,525.000*
e3. income from the clinical and paraclinical activities	*42,038.900*	*10,509.725*
f. income from other sources World Bank biotech other sources		
Total income (from all sources)	**9,269,310.408**	**2,317,327.602**

Table 3.2.2. Annual expenditure of the Faculty of Veterinary Medicine (2009)

Expenditure category	National currency (RON)	Euro
a. Personnel		
a1. teaching staff	3,680,714	920,178.500
a2. auxiliary staff	455,326	113,831.500
a3. research staff	398,012	99,503.000
Total of a	**4,434,052**	1,086,013.000
b. Operational costs		
b1. Maintenance expenses	1,990,127.000	497,531.750
b2. Expenditure for teaching	631,617.408	157,904.352
b3. Expenditure for research	298,509	
b4. General operations (excluding the above-mentioned)	-	73,877.250
Total of b	**2,920,253.408**	730,063.352

c. Equipments		
c1 Teaching	400,000	100,000.000
c2 Research	199,006	49,751.500
c3 General equipment (or usual one)	100,000	25,000.000
Total of c	**699,006**	174,751.500
d. Maintenance of buildings (rehabilitation)	839,999	209,999.750
e. Investments	276,000	69,000.000
f. Total expenditure	**9,269,310.408**	**2,317,327.602**

Table 3.2.3. Costs for veterinary training

	National currency (RON)	**Euro**
1. Annual direct costs for training per student **	5,050.397	1,262.60
2. Annual costs of training for diploma***	30,302.382	7,575.60

** **Costs for training**

$$\text{Cost per student/year} = \frac{3{,}689{,}714 + 455{,}326 + 631{,}617.408 + 400{,}000}{861} = 6{,}012 \text{ RON}$$

The numerator comprises:

a1- salaries of the teaching staff 3,680,714 RON

a2- salaries of the auxiliary staff 455,326 RON

b2-expenditure for teaching 631,617.408 RON

c1-expenditure for teaching equipment 400,000 RON

The denominator comprises the number of students

***__Direct costs of training for diploma__

6,012 x 6 = 36,072 RON

3.3. Comments

We should mention that the veterinary training, due to its specific characteristics, needs substantial supplementary financial resources. The financial support for hospital activities and clinical training is estimated around 100,000-150,000 RON (25,000-38,000 Euro)/month, including the maintenance expenses and expenditure with the treatment of animals.

From these financial effort, only 15% comes from the income obtained from clinical and laboratory activities.

The expenditure of the Faculty that exceed the budgetary funds is also partially compensated from the resources of the education with fee. This form of training is limited, as the financial resources of the candidates are also limited in comparison with the real costs of veterinary training.

The priority in using funds will be the institutional development and improvement of the training quality.

Having regard to finances, the faculty has no degree of autonomy, the financial decisions being made on the university level.

3.4. Suggestions

A more realistic evaluation of the costs of medical training in vet medicine should impulse the veterinary training and to a substantial financial support is compulsory for developing and assuring the surveillance in clinics, hospital, ambulatory practice and on-call emergency services.

A separate faculty account is needed.

The increase of the financing index, from the state budget.

CHAPTER 4

CURRICULUM

4.1. Factual informations

The legislation that governs the veterinary education in the EU countries (Directives 78/1026 and 78/1027/EEC) that presents the minimum compulsory requirements for all the State Members were also established in the Romanian legislation in the Government Decision 1477/2003 and further, the EC Directive 36/2005 was set in the Emergency Decree 109/2007.
Veterinary medicine education in Romania lasts for 6 years and has 360 credits for compulsory and optional subjects. At the end of the studies the graduates have their licence exam and obtain the Diploma of Veterinary Surgeon (equivalent to that of Master). For the facultative subjects and the licence exam they are given supplementary credits. The diploma is awarded by the Ministry of Education that checks the requirements of the compulsory curriculum.

4.1.1. Types of subjects and formatting procedures

The curriculum includes the following compulsory subjects
A- Basic subjects:
Biophysics, chemistry, animal biology, plant biology, biomathematics and computer science
B- Specific subjects:
Group 1: ***a. Basic sciences***
Anatomy, Cellular biology, histology and embryology, physiology, physiopathology, biochemistry, genetics, pharmacology, pharmacy, toxicology, immunology, epidemiology, deontology

Group 2: ***b. Clinical sciences***
Obstetrics, reproduction and its pathology, pathological anatomy, parasitology, medical pathology, surgery, propaedeutics and anesthesiology, semiology (including radiology), clinical courses on various domestic animals, poultry and other species, preventive medicine, veterinary state medicine and public health, veterinary legislation, forensic medicine, therapeutics.

Group 3: ***c. Animal productions***
Animal productions, animal nutrition, agronomy, rural economy, animal husbandry, veterinary hygiene and environmental protection, ethology

Group 4: d. Food hygiene

Inspection and control of food products of animal origin, food hygiene and technology, legislation, practical training (including training in slaughter houses, butcheries, factories of processing foods of animal origin).

Group 5: Professional knowledge

Management, marketing, management of projects.

The changes in the curriculum of FVM Iasi could be made when necessary. The procedure of changing include the proposal of the Department or of the Board of the Faculty Council. The changes are accepted by the Faculty Council and then by the University Senate. Each department can initiate the introduction of such changes. It can be accomplished with the demand from the Head of Department presented to the Board of the Faculty Council. At the meeting of the Faculty Council, each member can express their opinions. The decision is taken with the majority of votes. Generally, the decisions about the changes in the curriculum are taken with the consensus of the Faculty Council.

The syllabuses of the subjects are drawn up by the course titulars and are accepted at a department meeting. The Council Board approves the new syllabuses, monitors their repetition among other subjects and the ratio between the theoretical and practical parts of the course surveying whether the content of a given course is compatible with the requirements of the curriculum. When necessary, the peer-view of a given syllabus is carried out, and then it is approved by the Faculty Council. The procedure resembles the one of introducing changes in the curriculum.

The decision of the distribution of hours for given courses as well as within a course is taken by the Faculty Council. The minimum number of hours for an independent course is of 14 hours. The maximum number is 28 per semester, 56 per academic year for courses of two semesters, respectively 112 hours for the entire curriculum for courses of 4 semesters. The number of hours for each subject is determined depending on the importance of the subject in students' training and the evolution of knowledge and means of communication. The distribution of hours for the theoretical and practical parts within the same subject is done according to the syllabus. Generally, the number of hours for theoretical training is smaller or equal to the number of hours for the practical training.

In order to have an integral curriculum, both the topics presented to the students and the evaluation methods are monitored. The subjects are taught in a strict order, starting with the fundamental courses and ending with the clinical and veterinary public heath subjects that develop the skills of the future graduate. This order is determined on the basis of past experience and is established by the Faculty Council.

4.1.2 Curriculum followed by all students

A synthesis of the curriculum on the 6 years is presented in Table 4.1. The compulsory hours of self-directed training are allocated in the exam sessions (3 weeks in the January-February session and 4 weeks in June session). As for the exams that the students failed to pass, a special session of one week is organized at the end of each compulsory session.

Table 4.1: **General table with the number of hours of the curriculum followed by all students**

Year	Hours of training							
	Theoretical training			Supervised practical training			Others	Total
	Lectures (A)	Seminars (B)	Self-directed learning (C)	Laboratory (D)	Non-clinical animal work (E)	Clinical work (F)	(G)	
I	294	84	210	336	44		60	1028
II	378	28	210	306	160		30	1112
III	406		210	308	144	44		1112
IV	406	28	210	222	65	209		1140
V	378	14	210	54	91	289		1036
VI	147	14	150	88	30	262	60	751
Total	2009	168	1200	1314	534	804	150	6179

The curriculum of FVM Iasi was adapted to the EU Directive 36/2005. The curriculum hours at the subjects stipulated in the EU Directive 36/2005, followed by each student (compulsory) are presented in Table 4.2.

Table 4.2: Curriculum hours at the subjects stipulated in the EU Directive 36/2005 followed by each student (compulsory)

Subjects		Theoretical training			Supervised practical training			Others	Total
		Lectures	**Seminars**	**Self-directed learning**	**Laboratory**	**Non-clinical animal work**	Clinical work		
1. Basic Subjects									
a. Biophysics		28		21	28				77
b. Chemistry		28		21	28				77
c .Animal biology		28			14	14			56
d. Plant biology		14		21	14				49
e. Biomathematics		14	14	14					42
1. Total number of hours		**112**	**14**	**77**	**84**	**14**			**301**
2 .Basic Sciences									
a. Anatomy (incl. Histology and Embryology)	Anatomy	112		84	112	28			336
	Histology and Embryology	56		42	56				154
b. Physiology		56		42	28	28			154
c. Biochemistry, cellular and molecular biology	Biochemistry I	42		21	56				119
	Molecular biology	14		21	28				63
d. Genetics (inclusive Molecular genetics)		28		21	28				77
e. Pharmacy and pharmacology		70		42	70	14			196
f. Toxicology (incl. Environmental pollution)		56		35	40	16			147
g. Microbiology	Virology	28		21	28				77
	Microbiology (Bacteriology and Mycology)	56		42	40	16			154
h. Immunology		28		21	28				77
Epidemiology incl. technical and scientific information, as well as methods of scientific information and documentation	Epidemiology	28	28	21					77
J .Professional ethics: veterinary deontology		7							7
2. Total number of hours		**581**	**28**	**413**	**514**	**102**			**1638**
3. Clinical sciences									
a. Obstetrics		28		21			28		77
b. Pathology (incl. pathological anatomy)	Internal medicine	112		84	14		112		322
	Semiology	56		35	28	14			147
	Pathological anatomy	56		42	28	28			154
	Physiopathology	28		21	42				91
c. Parasitology		84		49	56		28		217
d. Clinical medicine and surgery (incl. Anaesthesiology)	Surgical Propaedeutics and anaesthesiology	28		21			28		77
	Pathology and clinical surgery	70		42			108		220
e. Clinical lectures on various domestic animal, poultry and	Clinics of companion animals	14					77		91
	Clinics of large	14					98		112

other animal species	animals								
	Clinics of porcine and poultry	14					28		42
f. Veterinary medicine – ambulatory						60			60
g. Preventive medicine	Infectious diseases and preventive medicine	98		84	42	42			266
h. Diagnostic imaging (incl. Radiology)		14		14			14		42
i. Reproduction and reproductive disorders	Animal reproduction	28		21	28				77
	Reproduction pathology	56		42			56		154
j. Veterinary state medicine and public health		14	14	14					42
k. Veterinary legislation		14	14						28
Forensic medicine		28		21	20		22		91
l. Therapeutics		14		14			14		42
m. Laboratory diagnostic methods		14			28				42
3. Total number of hours		**784**	**28**	**525**	**286**	**158**	**613**		**2394**
4. Animal productions									
a. Animal production		28		21	14	14			77
b. Animal nutrition		56		35	56				147
c. Agronomy		14		14	14				42
d. Rural economics		14	14	14					42
e. Animal husbandry		56		35	28	28			147
f. Veterinary hygiene		28		21	28				77
g. Ethology and animal protection		28		21	14	14			77
4. Total number of hours		224	14	161	154	56			609
5. **Food hygiene /Public health**									
a. Inspection and control of food products of animal origin		56				40			96
B. Hygiene and food technology	Hygiene and food technology	56				28			84
c. Food technology and legislation - Food safety		14			14				28
d. Practical works					88				58
5. Total number of hours		126			72	68			266
6. **Professional knowledge**									
a. Practice management			30	24					54
b. Veterinary certification and report writing									
c. Career planning and opportunities									
6. Total number of hours			30	24					54
7. **Practice**					60	180	210		450
Practice for preparing the licence paper					60		60	60	180

The optional subjects are presented in Table 4.3.

Each year, the student can choose al least one of 2-4 optional subjects. Once chosen, the subject becomes compulsory. If students want to attend a supplementary optional subject, they will pay a fee proportional to the weight of the subject in the curriculum and to the annual study fee.

Table 4.3: Curriculum of EU subjects offered as optional

Subject	Theoretical training		Supervised practical training			Others	Number of hours attended by each student on group of study
	Lectures	Seminars	Laboratories	Non-clinical animal work	Clinical work		
Basic subjects	A	B	C	D	E	F	
Foreign languages: English French Spanish German	14	98					
Basic sciences							
Biology of laboratory animals	14			14			
History of veterinary medicine	14			14			
Cellular pathology and comparative oncology	14		14				28
Laboratory diagnosis	14		14				
Cytological diagnosis	14		14				28
Mycology and mycotoxicology	14		14				
Clinical sciences							
Medical imaging	14				14		28
Veterinary dermatology	14				14		28
Veterinary Orthopaedics	14				14		
Experimental medicine	14				14		
Pathology of fish, bees and silkworms	14				14		
Nutrition disorders and metabolism	14				14		28
Ophthalmology	14				14		
Orthopaedics	14				28		42
Animal productions							
Biotechnics of reproduction	14		28				42
Professional competences							
Management of projects	14	14					28
Methods of scientific information and documentation	14	14					

The facultative subjects are shown in Table 4.4. Their study is fee-conditioned. The students receive supplementary credits, but the grades at these subjects are not taken into consideration at the average grade for the scholarships, but only at the general average grade.

Table 4.4. Curriculum hours in subjects offered as facultative*

Subject	Theoretical training		Supervised practical training			Others	Number of hours attended by each student on group of study
	Lectures	Seminars	Laboratory	Non-clinical animal work	Clinical work		
Basic subjects	A	B	C	D	E	F	
Physical education						56	56
Foreign languages: English French Spanish German		112					58
Basic sciences							
Anatomy and physiology of fur animals	14			28			42
Pedagogy	70	84					154
Pedagogical training						42	42

*Nr of hours for preparing the final thesis (180) are included in Table 4.2

4.1.3. Further information on the curriculum

At the beginning of the academic year, the student's guide is drawn up, where there are stipulated the students' rights and duties, curriculum, examination methods, rules about the credits, student facilities etc.

On the first day of the academic year, the newly admitted students meet the dean and their mentor, as well as the titulars of the courses that are to be taught during the first year. The students are presented their rights, duties and important information about the curriculum. Each student receives the Student's Guidebook.

The Student's Guidebook states that the attendance of courses and practical works is compulsory. This is very strictly observed for the practical training and nonattendance is permitted only on very important reasons (health problems, pregnancy etc.). The classes that the students fail to attend are taken later during the academic year, thus, the minimum attendance of that semester is certified by the titular of the course. The attendance tracking records of the practical training are kept at the department.

The attendance rate of the theoretical part of the study is determined by the titutar of the course.

Up to the beginning of the clinical training, the students are familiar with the methods of diagnosis and treatment from the courses of semiology and propaedeutics, with clinical practice in laboratories, anaesthesiology etc. Thus, the students can actively participate in receiving and examining the patients in the faculty clinics as well as during the visits to farms in order to improve their skills.

4.1.3. Specific information on the practical training in clinics

The activity in clinics is compulsory and represents an essential part in students' training during the final years (4th, 5th and 6th).

This practical training is mandatory in the following clinics:

Internal medicine
Surgery
Obstetrics -Gynaecology
Infectious diseases
Parasitology

In the 6th year, the practical training in clinics is done at 3 specializations:

1. Companion animals
2. Large animals (ruminants and equine)
3. Porcine and poultry

The 4th and 5th years have 2 semesters each with 14 weeks. The students can switch the clinics during the 14 weeks of each semester.

The 6th year has 2 semesters:

Semester 1 – 14 weeks
Semester 2 – 7 weeks

The rotation on the 5 clinics mentioned above is organised during the 2 semesters according to schedule, all clinics being compulsory for each student.

The attendance of students in the clinics is mandatory from 8 am to 8 pm, according to the schedule.

The following activities are performed by the students:

-taking anamnesis of the animals present at the clinical examination
-clinical examination of the animals
-writing the observation charts
-suggesting paraclinical examinations for a correct diagnosis and interpretation of the results
-presenting the case to the professor who supervises the practical training and discussing on the case
-taking part in the treatment together with the instructor
-following the case till the animal is fully recovered or dies

The groups of students consist of 12-14 persons.

The principles of animal examination are adequate for the students attending the courses of Semiology and Medical Imaging. Moreover, the students get familiar with the different methods of examination specific to each clinic.

The students have practical training in each clinic as follows:

The clinic of Internal Medicine during the 4th year – they have clinical activities such as writing the observation chart, semiological examination, various methods of clinical examination, simulations of clinical diagnosis of real and hypothetical cases.

Propaedeutics and Surgery Clinic during the 3rd and 4th year – propaedeutics and surgery semiology, ophthalmology orthopaedics and imaging, students assist at operations performed within the clinic.

In the 4th year, the second semester, in the Clinic of Obstetrics-Gynaecology the students practise the obstetric-gynaecological and andrologic examination and are presented the dystocia and its remedies, as well as surgeries which are also applied in other cases.

In the Clinic of Parasitic Diseases the 4th year student get familiar to the morphology of parasites, their biology and ways of propagation as well as the methods of parasitological diagnosis.

In the Clinic of Infectious Disease there are presented the specific symptoms of each infectious disease, the general methods of diagnosis, diagnosis simulations of these disease on real and hypothetical cases.

The students in the 6th year, in series, will be on duty that go on for 24 hours a day, together with the veterinary surgeons that are on duty.

They clean the cages of the hospitalized animals, clean and feed the animals, apply the treatments given by the surgeons.

Students must take part in the activities of the mobile clinic.

The activities in the mobile clinic are carried out each week or when necessary, at the request of the animal breeders or of the veterinary authorities. The students' activities are the following:

- assist in identifying the animals presented for clinical examination;
- write the anamnesis of the animals that are to be examined;
- fill in the observation chart
- examine the animals;
- assist in establishing a presumptive diagnosis;
- take part in therapy, together with the trainer.

The hours spent in the mobile clinic during the weekly activities are included in table 4.21.3. The activities performed at the animal breeders' request are also included.

The practice for preparing the licence diploma takes place at the end of the 6th years, lasting 6 weeks (180 hours). In this period the students carry out research activities under the supervision of a titular, according to the specific of the subject they chose for the licence paper. The distribution of licence papers on subjects is established in the Professors' Council, according to the weight of the subject in the students' training.

4.1.4. **Obligatory extramural work**

I. Zoo technical practice

At the end of the 1st and 2nd years, the students have a training stage (under the supervision of an instructor) in animal farms.

Duration: 3 weeks, a stage = 15 days, 90 hours.
Aim: Students are acquainted with issues related to animal feeding, dietetics, veterinary sanitary expertise of forages, zoohygiene, breeding and animal husbandry, treatment in case of disease, prophylactic vaccination. They learn the farm-specific diseases, methods of prevention and treatment as well as security measures, means of disinfection, quarantine of introduced animals etc. At this stage of practical training students aim at developing the primary practical skills, expand their knowledge learned from the preclinical courses.
Placement: The practice takes place in animal farms, experimental stations, private farms.
Control and supervision of practice: They are performed by the academic staff and veterinary surgeons on duty in the respective farm or the farm manager.
Practice exam: It takes place at the end of the stage, after presenting a report of the activities performed during the training and is checked by the supervisor. The evaluation is made by the commission appointed by the dean, consisting in the mentor of the year and another titular. The result (grade from 1 to 10) is written down in the student book.

The students with negative evaluation of preclinical practice stage are not allowed to progress to the subsequent semester.

II. Practice after the completion of the 6th semester (3rd year of study) takes place in enterprises from the food industry, veterinary sanitary laboratories from various counties and private farms. The stage lasts 3 weeks and the examination takes place under the same conditions as the 1st and 2nd year stage.

III. Practice in clinics. At the end of the 4th and 5th years, the students have a stage of practical training of 3 weeks in private veterinary clinics.
Aim: The aim is to expand and improve the practical skills of the students after passing the clinical courses.
Placement: private veterinary clinics (of small or mixed animals) from their area of residence and/or regional veterinary centres. During the first day of the practice, the students are introduced in the regional veterinary services and state the place where the training stage will take place. At the end of this period, they present the documents (practice book, charts of clinical observation) on the basis of which the certificate of attendance and the characterization of their activity by the supervisor are issued.
Foreign students are allowed to pass half of the time of their practice abroad. FVM Iasi does not support financially such placements.
Needed documents:

- Clinical charts, including the diagnosis and treatment of the examined patients.
- Certificate of attendance and Characterization: a short text that mentions the period of the practical stage and the student performance. The document is signed and sealed by the veterinary surgeon–supervisor.

The validation of practice is done after the discussion between the student and the commission appointed by the Dean and examines the presented documents and asks questions to the students. The commission consists of 2 professors, the mentor of the year and professor or a reader from the clinical departments.

4.1.5. Specific information on the practical training in food hygiene

The subjects Food hygiene, quality and technology and Inspection and control of products of animal origin develop activities of practical training in production enterprises.

The Faculty of Veterinary Medicine collaborates with 3 slaughterhouses, 1 enterprises of meat processing, 2 enterprises of milk processing, a centre of physic-chemical and microbiological control of products and food of animal origin which is part of the State Veterinary Laboratory Iasi.

The S.C. „Romtrading" Co. poultry slaughterhouse is situated near the town of Tg. Frumos, at 46 km from the faculty of Veterinary Medicine. The students can arrive there by a local bus. The slaughterhouses for swine (S.C. Kosarom S.A.) and bovine (S.C. Romcarn Prod SRL) are situated in Pascani, at 70 km from the faculty.

These slaughterhouses are the main enterprises where the students can do their practical training. During theses activities, the students are provided with a dressing room, rooms where they can learn the examination techniques of carcasses and organs.

The access of the students is allowed only under the supervision of the specialised academic staff; the large groups of students are divided in 3 smaller groups of 5 students, each group being led by a professor.

During the hours of practical works, the students have the opportunity to develop activities from various domains (examination before slaughtering, bleeding, skin control, examination of the organs in the head, carcasses, refrigeration control and freezing advantages).

The enterprises of meat products SC Agricola International from Bacau is the main location for practical activities of meat processing. This enterprise have specific equipment for industrial processing.

The facilities of the refrigeration area, as well as those belonging to Metro Company are visiting places for the 5th year students, in order to have contact with the reality of these specialised enterprises.

2. Comments

The curriculum has undergone changes that have enhanced the future training of the veterinary surgeon in accordance with the requirements for the European integration. Thus, several meetings took place both in our country and in France. New laws were established in the Governmental Decree 1477/2003.

Due to the large number of cases of companion animals in the urban areas, the faculty has reoriented the clinical activity with the implementation or study of several subjects such as Clinics of companion animals, Dermatology, Exotic pathology, Cellular pathology and Comparative Oncology.

The ratios of the academic process were influenced by reducing the length of the course in favour of increasing the time for self-centred study at the library or on the internet, hours of supervised clinics and practice. That is why students should have access to an adequate source of information (internet, multiplying devices, e-mail, and video materials).

The aims of the curriculum are:

- accomplishing a training that will allow the graduates a rapid integration in solving the veterinary issues for reproduction in private farms in the central and north-eastern part of Romania;
- bringing the educational process and the veterinary academic staff to the standards of the European Community
- increasing the efficiency of veterinary activities and services in order to become nationally and internationally competitive

In the near future, major changes of development of the curriculum can deal with the following problems:

- Food safety;
- Supervise and control of emerging diseases;
- Animal protection and welfare;
- Toxicological supervising and environmental protection.

3. Suggestions

The training process can be improved by acquiring better equipment for the clinics, emergency rooms and lecture halls.

For gaining the necessary funds, the faculty will have a preordained number of students with fee and will increase the income from other sources (scientific research, paraclinical activities, specialised expertise).

4. 1. 6. RATIOS

4.1.6.1. GENERAL INDICATORS TYPES OF TRAINING

Figure	Total number of teaching hours
A	2009
B	168
C	1200
D	1314
E	534
F	804
G	150

R6: Theoretical training (A+B+C) 3377 1:1.27
Supervised practical training (D+E+F) 2652

R7: Clinical work (F) ----- 804 1: 2.29
Laboratory and desk based work (D+E) 1848
+non/clinical animal work

R8: Self directed learning ----- 1200 1: 5.15
Teaching load ----- 6179

4.1.6.2 SPECIAL INDICATORS OF TRAINING IN FOOD HYGIENE/PUBLIC HEALTH

R9: Total no curriculum hours
Food hygiene/Public heath ----- 296 1:20.8
Total no. Hours vet curriculum ----- 6179

R10: Hours obligatory extramural work
in veterinary inspection ----- 88 1: 3.36
Total no curriculum hours ----- 296
Food hygiene/Public heath

CHAPTER 5

TEACHING, QUALITY, LEARNING

5.1 Factual information

The modern university education has three main areas: teaching – learning – assessment. They succeed one another and are reciprocally conditioned. The two partners of the academic community, the teaching staff and the students, take part in achieving the objectives of the three stages of the educational process in variable proportions: when teaching, the implication is higher for the teaching staff, when learning the implication in higher for the students, while at the assessment, both are equally involved.
At FVM Iasi, in 2009/2010 academic year, at all the years of study the syllabuses are in accordance with the objectives of Bologna Process.

5.1.1. Curriculum

The syllabus for the courses of study (subjects) studied at FVM Iasi was established in accordance with the National plan of studies and comprises the fundamental and complementary objectives.

The fundamental objectives aim at developing certain specific abilities that are needed when becoming a vet, and also developing distributive attention and flexible thinking. All these are useful for analysing the biological processes, identifying and logically interpreting the symptoms, setting an operative, cheap and highly efficient therapeutic protocol.

The complementary objectives monitor the progresses achieved in gaining new abilities and knowledge useful to the students in the following domains:

- *health of farm animals and pets*
- *control of the animal origin products and human health*
- *obtaining biological and pharmaceutical products for veterinary use*
- *specialized research institutions*
- *education in specialized high schools and faculties*

The study syllabus, presented in the *curriculum*, on years of study, is made gradually, from simple to complex, from subjects of general medical interest to those of immediate use in veterinary practice. *(Table 5.1)*

Table 5.1

Curriculum of FVM Iasi,

2009/2010 academic year I st YEAR

Nr. crt	Discipline	Code	Sem. 1 – 14 weeks C	S	L	E/C	Phis hrs	Conv.hrs	No. cred	Sem. 2 – 14 weeks C	S	L	E/C	Phis hrs	Conv.hrs	No. cred	Total phis hrs.	Total Conv hrs	No cred
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17		18
I A. BASIC COMPULSORY MATTERS																			
1.	Biophisics	MV.Mv.F.101	2	-	2	***E***	**56**	**84**	**4**	-	-	-	-	-	-	-	**56**	**84**	**4**
2.	Chemistry	MV.Mv.F.102	2	-	2	**C**	**56**	**84**	**4**	-	-	-	-	-	-	-	**56**	**84**	**4**
3.	Animal biology	MV.Mv.F.103	2	-	2	**E**	**56**	**84**	**4**	-	-	-	-	-	-	-	**56**	**84**	**4**
4.	Plant biology	MV.Mv.F.104	-	-	-	-	-	-	-	1	-	2	**E**	**42**	**56**	**3**	**42**	**56**	**3**
5.	Biomathematic and informatics	MV.Mv.C.105	-	-	-	-	-	-	-	1	-	2	**C**	**42**	**56**	**3**	**42**	**56**	**3**
	B. SPECIFIC COMPULSORY	**MATTERS**																	
6.	Animal anatomy	MV.Mv.D.106	2	-	3	**E**	**70**	**98**	**5**	2	-	3	***E***	**70**	**98**	**5**	**140**	**196**	**10**
7.	Cell biology, histology and embriology	MV.Mv.D.107	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**5**	**112**	**168**	**9**
8.	Biochemistry	MV.Mv.D.108	-	-	-	-	-			2	-	2	**E**	**56**	**84**	**4**	**56**	**84**	**4**
9	Agronomy	MV.Mv.C.109	-	-	-	-	-	-	-	1	-	1	**C**	**28**	**42**	**2**	**28**	**42**	**2**
10.	Rural economy	MV.Mv.C.110	1	1	-	**C**	**28**	**42**	**3**	-	-	-	-	-	-	-	**28**	**42**	**3**
11.	Practical training(sem.II, 3 weeks, 6h/day)	MV.Mv.S.111	-	-	-	-	-	-	-	-	-	-	**C**	**90**	**90**	**6**	**90**	**90**	**6**
	Total I		**11**	**1**	**11**	**4E+2C**	**322**	**476**	**24**	**9**	**-**	**12**	**4E+3C**	**384**	**510**	**28**	**706**	**986**	**52**
					23					**21**									
II. OPTIONALS (AT CHOICE)																			
12	Foreign languages	MV.Mv.C.112	-	2	-	***C***	**28**	**28**	**3**	-	2	-	***C***	**28**	**28**	**3**	**56**	**56**	**6**
	History of veterinary medicine	MV.Mv.D.113			-	-	-	-	-	1	1	-	C	28	42	2	**28**	**42**	**2**
	Biology of lab.animals	MV.Mv.D.114	-	-	-	-	-	-	-	1	-	1	C	28	42	2	**28**	**42**	**2**
13	Informing, documentation and scientific communication	MV.Mv.C.115	-	-	-	-	-	-	-	1		1	C	28	42	2	**28**	**42**	**2**
	TOTAL II		**-**	**2**	**-**	**C**	**28**	**28**	**3**	**1**	**3**	**1**	**2C**	**56**	**70**	**5**	**56**	**70**	**8**
	TOTAL I + II		**11**	**3**	**11**	**4E+3C**	**350**	**504**	**27**	**10**	**3**	**13**	**4E+5C**	**440**	**580**	**33**	**790**	**1084**	**60**
					25					**25**									
III. FACULTATIVE (AT REQUEST)																			
14	Physical training *	MV.Mv.C.116	-	1	-	C	14	14	-	-	1	-	C	14	14	-	**14**	**14**	-
DEPARTAMENT FOR TEACHING STAFF TRAINING																			
15	Education psychology	M1.Ob.01.121	2	2	-	E	56	84	**5**	-	-	-	-	-	-	-	**42**	**56**	**5**
16	Pedagogy I (Fundaments of pedagogy +Theory and mehodology of curricula)	M1.Ob.02.122	-	-	-	-	-	-	-	2	2	-	E	56	84	5	**42**	**56**	**5**

Note: no. of conventional hours = (Cx2 + S + L + Pr)x14;

*Attendance of Physical training and obtaining the mark Admitted is compulsory for the licence exam.

II-nd YEAR

Nr. crt	Discipline	Code	Sem. 1 – 14 weeks							Sem. 2 – 14 weeks							Total phis hrs.	Total Conv hrs	No cred
			C	S	L	E/C	Phis hrs	Conv.hrs	No. cred	C	S	L	E/C	Phis hrs	Conv.hrs	No. cred			
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
I. SPECIFIC COMPULSORY MATTERS																			
1	Biochemistry	MV.Mv.D.201	1	-	2	**E**	**42**	**56**	**3**	-	-	-	-	-	-	-	**42**	**56**	**3**
2	Animal anatomy	MV.Mv.D.202	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**8**
3	Physiology	MV.Mv.D.203	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**8**
4	Pathophysiology	MV.Mv.D.204	-	-	-	-	-	-	-	2	-	3	**E**	**70**	**98**	**4**	**70**	**98**	**4**
5	Genetics	MV.Mv.D.205	-	-	-	-	-	-	-	2	-	2	**E**	**56**	**84**	**4**	**56**	**84**	**4**
6	Molecular biology	MV.Mv.D.206	1	-	2	**E**	**42**	**56**	**4**	-	-	-	-	-	-	-	**42**	**56**	**4**
7	Animal nutrition	MV.Mv.D.207	2	-	2	**C**	**56**	**84**	**3**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**7**
8	Animal breeding	MV.Mv.D.208	2	-	2	**C**	**56**	**84**	**3**	2	-	2	**C**	**56**	**84**	**3**	**112**	**168**	**6**
9.	Microbiology	MV.Mv.D.209	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**8**
10	Practical training(sem.II,3 weeks 6h/day	MV.Mv.S.210	-	-	-	-	-	-	-	-	-	-	**C**	**90**	**90**	**6**	**90**	**90**	**6**
	Total I		**12**	**-**	**14**	**5E+2C**	**364**	**532**	**25**	**14**	**-**	**15**	**6E+ 2C**	**496**	**692**	**33**	**860**	**1224**	**58**
						26							**29**						
II. OPTIONALS(AT CHOICE)																			
11	Foreign languages	MV.Mv.C.211	1	1	-	**C**	**28**	**42**	**1**	-	1	-	**C**	**14**	**14**	**1**	**42**	**56**	**2**
	TOTAL II		**1**	**1**	**-**	**1C**	**28**	**42**	**1**	**-**	**1**	**-**	**1C**	**14**	**14**	**1**	**42**	**56**	**2**
	TOTAL I + II		**13**	**1**	**14**	**5E+3C**	**392**	**574**	**26**	**14**	**1**	**15**	**6E+3C**	**510**	**706**	**34**	**902**	**1280**	**60**
						28							**30**						
III. FACULTATIVE (AT REQUEST)																			
12	Anatomy and physiology of fur animals	MV.Mv.D.212	1	-	2	**C**	**42**	**56**	**2**	-	-	-	-	-	-	-	**42**	**56**	**2**
13	Physical training	MV.Mv.C.213	-	1	-	**C**	**14**	**14**	**-**	-	1	-	**C**	**14**	**14**	**-**	**(28)**	**(28)**	**-**
DEPARTMENT FOR TEACHING STAFF TRAINING																			
14	Pedagogy II (Theory and methodology of training+ Theory and methodology of evaluation)	M1.Ob.02.103	2	2	-	**E**	**56**	**84**	**5**	-	-	-	-	-	-	-	**56**	**84**	**5**
15	Didactics of speciality	M1.Ob.03.104	-	-	-	-	-	-	-	2	2	-	**E**	**56**	**84**	**5**	**56**	**84**	**5**

Note: no. of conventional hours = (Cx2 + S + L + Pr)x14;

III-rd YEAR

Nr. crt	Discipline	Code	Sem. 1 – 14 weeks							Sem. 2 – 14 weeks							Total phis hrs.	Total Conv hrs	No cred
			C	S	L	E/C	Phis hrs	Conv hrs	Nr.cred	C	S	L	E/C	Phis hrs	Conv hrs	Nr.cred			
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
I. SPECIFIC COMPULSORY MATTERS																			
1	Animal production	MV.Mv.D.301	2	-	2	**C**	**56**	**84**	**3**	-	-	-	**-**	**-**	**-**	**-**	**56**	**84**	**3**
2	Pharmacology	MV.Mv.D.302	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**8**
3	Pathological anatomy	MV.Mv.D.303	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**8**
4	Semiology	MV.Mv.S.304	2	-	2	**C**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**7**
5	Epidemiology	MV.Mv.D.305	-	-	-	**-**	**-**	**-**	**-**	2	-	2	**C**	**56**	**84**	**4**	**56**	**84**	**4**
6	Parasitology and parasitic diseases	MV.Mv.S.306	-	-	-	**-**	**-**	**-**	**-**	2	-	2	**E**	**56**	**84**	**4**	**56**	**84**	**4**
7	Surgical propaedeutics and anaestesiology	MV.Mv.S.307	-	-	-	**-**	**-**	**-**	**-**	2	-	2	**E**	**56**	**84**	**4**	**56**	**84**	**4**
8	Immunology and immunopathology	MV.Mv.D.308	2	-	2	**E**	**56**	**84**	**4**	-	-	-	**-**	**-**	**-**	**-**	**56**	**84**	**4**
9	Virusology	MV.Mv.D.309	2	-	2	**E**	**56**	**84**	**3**	-	-	-	**-**	**-**	**-**	**-**	**56**	**84**	**3**
10	Etology, well-being and animal protection	MV.Mv.S.310	2	-	2	**E**	**56**	**84**	**3**	-	-	-	**-**	**-**	**-**	**-**	**56**	**84**	**3**
11	Veterinary hygiene and environment protection	MV.Mv.D.311	-	-	-	**-**	**-**	**-**	**-**	2	-	2	**E**	**56**	**84**	**4**	**56**	**84**	**4**
12	Practical training(sem.II,3 weeks 6h/day	MV.Mv.S.312	-	-	-	-	-	**-**	**-**	-	-	-	**C**	**90**	**90**	**6**	**90**	**90**	**6**
	TOTAL I		**14**	**-**	**14**	**5E+2C**	**392**	**588**	**25**	**14**	**-**	**14**	**6E+2C**	**482**	**678**	**34**	**874**	**1266**	**59**
				28					**28**										
II. OPTIONALS (AT CHOICE)																			
13.	Laboratory diagnosis	MV.Mv.S.313	-	-	-	-	**-**	**-**	**-**	1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Cellular pathology and compared oncology	MV.Mv.S.314	-	-	-	-	**-**	**-**	**-**	1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Medical imagery	MV.Mv.S.315	-	-	-	-	**-**	**-**	**-**	1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	TOTAL II		-	-	-	-	**-**	**-**	**-**	**1**	**-**	**1**	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	TOTAL I+II		**14**		**14**	**5E+2C**	**392**	**588**	**25**	**15**	**-**	**15**	**6E+3C**	**510**	**720**	**35**	**902**	**1308**	**60**
				28					**30**										
III. FACULTATIVE (AT REQUEST)																			
14	Foreign languages	MVMv.C.316	-	2	-	C	**14**	**14**	**1**	-	2	-	**C**	**14**	**14**	**1**	**28**	**28**	**2**
DEPARTMENT FOR TEACHING STAFF TRAINING																			
15	Optional matters : 1. Techniques of information and communication 2. Techniques of scientific communication 3. Techniques of creative communication	M1.O.01.105	1	2	-	C	**42**	**56**	**4**	-	-	-	**-**	**-**	**-**	**-**	**42**	**56**	**4**
16	Teaching practice	M1.Ob.03.106	-	3	-	C	**42**	**42**	**3**	-	3	-	**C**	**42**	**42**	**2**	**84**	**84**	**5**
17	Graduation exam :Lvl 1					E			**5**										**5**

IV-th YEAR

Nr. crt	Discipline	Code	Sem. 1 – 14 weeks							Sem. 2 – 14 weeks							Total phis hrs.	Total Conv hrs	No cred
			C	S	L	E/C	Phis hrs	Convhrs	Nr.cred.	C	S	L	E/C	Phis hrs	Convhrs	Nr.cred.			
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
I. SPECIFIC COMPULSORY MATTERS																			
1	Surgical propaedeutics and anaestesiology	MV.Mv.S.401	2	-	2	**E**	**56**	**84**	**3**	-	-	-	-	-	-	**-**	**56**	**84**	**3**
2	Pathology and internal medicine	MV.Mv.S.402	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**8**
3	Pathology and surgical clinics	MV.Mv.S.403								2	-	2	**E**	**56**	**84**	**4**	**56**	**84**	**4**
4	Infectious diseases and preventive medicine	MV.Mv.S.404	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**8**
5	Parasitology and parasitic diseases	MV.Mv.S.405	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**C**	**56**	**84**	**3**	**112**	**168**	**7**
6	Animal reproduction	MV.Mv.S.406	2	-	2	**E**	**56**	**84**	**3**	-	-	-	**-**	**-**	**-**	**-**	**56**	**84**	**3**
7	Veterinary obstetrics	MV.Mv.S.407	-	-	-	**-**	**-**	**-**	**-**	2	-	2	**E**	**56**	**84**	**4**	**56**	**84**	**4**
8	Food hygiene and technology	MV.Mv.S.408	2	-	2	**E**	**56**	**84**	**3**	2	-	2		**56**	**84**	**4**	**112**	**168**	**7**
9	Toxicology	MV.Mv.S.409	2	-	2	**C**	**56**	**84**	**3**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**7**
10	Practical training(sem.II,3 weeks 6h/day	MV.Mv.S.410	**-**	**-**	**-**	**-**	-	**-**	**-**	-	-	-	**C**	**90**	**90**	**6**	**90**	**90**	**6**
	Total I		**14**	**-**	**14**	**6E+1C**	**392**	**588**	**24**	**14**	**-**	**14**	***6E+2C***	**482**	**678**	**33**	**874**	**1266**	**57**
			28							**28**									
II.OPTIONALS(AT CHOICE)																			
11	Veterinary dermathology	MV.Mv.S.411	**-**	**-**	**-**	-	-	-	**-**	1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Veterinary orthopedy	MV.Mv.S.412	**-**	**-**	**-**	-	-	-	**-**	1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Experimental medicine	MV.Mv.S.413	**-**	**-**	**-**	-	-	-	**-**	1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Pathology of fish, bees and silk worms	MV.Mv.S.414	**-**	**-**	**-**	-	-	-	**-**	1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
12	*Foreign languages*	MV.Mv.C.415	**-**	**1**	**-**	VP	14	14	1	-	1	-	**VP**	**14**	**14**	**1**	**28**	**28**	**2**
	Total II		**-**	**1**	**-**	**1VP**	**14**	**14**	**1**	**1**	**1**	**1**	**1C +1VP**	**42**	**56**	**2**	**56**	**70**	**3**
	Total I +II		**14**	**1**	**14**	**6E+1C 1 VP**	**406**	**602**	**25**	**15**	**1**	**15**	**6E+3C +1VP**	**552**	**762**	**35**	**930**	**1336**	**60**
			29							**31**									

Note: no. of conventional hours = (Cx2 + S + L + Pr)x14;

Foreign languages(at choice): English, French, German, Spanish

V-th YEAR

Nr. crt	Discipline	Code	Sem. 1 – 14 weeks							Sem. 2 – 14 weeks							Total phis hrs.	Total Conv hrs	No cred
			C	S	L	E/C	Phis hrs	Convhrs	Nr.cred.	C	S	L	E/C	Phis hrs	Convhrs	Nr.cred.			
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
	I. SPECIFIC COMPULSORY MATTERS																		
1	Pathology and internal medicine	MV.M.v.S.501	2	-	3	**E**	**70**	**98**	**5**	2	-	3	**E**	**70**	**98**	**5**	**140**	**196**	**10**
2	Surgery	MV.M.v.S.502	2	-	2	**E**	**56**	**84**	**4**	2	-	3	**E**	**70**	**98**	**5**	**140**	**196**	**9**
3	Pathology of reproduction	MV.M.v.S.503	2	-	2	**E**	**56**	**84**	**4**	2	-	3	**E**	**70**	**98**	**5**	**140**	**196**	**9**
4	Infectious diseases and preventive medicine	MV.M.v.S.504	2	-	2	**E**	**56**	**84**	**4**	2	-	2	**E**	**56**	**84**	**4**	**112**	**168**	**8**
5	Inspection and control of animal products and food	MV.M.v.S.505	2	-	2	**E**	**56**	**84**	**3**	2	-	2	**E**	**56**	**84**	**3**	**112**	**168**	**6**
6	Therapeutics	MV.M.v.S.506	-	-	-	-	-	-	-	1	-	1	**C**	**28**	**42**	**2**	**148**	**42**	**2**
7	Legislation and veterinary deontology	MV.M.v.S.507	-	-	-	-	-	-	-	2	1	-	**C**	**42**	**70**	**3**	**42**	**70**	**3**
8	Legal medicine	MV.M.v.S.508	2	-	3	**E**	**70**	**98**	**4**	-	-	-	-	-	-	-	**70**	**98**	**4**
9	Inspection and control of feed	MV.M.v.S.509	1		2	**C**	**42**	**56**	**2**	-	-	-	-	-	-	-	**42**	**56**	**2**
10	Practical training(sem.II,3 weeks 6h/day	MV.M.v.S.510	-	-	-	-	-	-	-	-	-	-	**C**	**90**	**90**	**6**	**90**	**90**	**6**
	TOTAL I		**13**	**-**	**16**	**6E+1C**	**406**	**588**	**26**	**13**	**1**	**14**	***5E+3C***	**482**	**664**	**33**	**888**	**1252**	**59**
			28							**28**									
	II.OPTIONALS (AT CHOICE)																		
11	Mycology and mycotoxicology	MV.Mv.S.511								1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Methabolic and nutritional diseases	MV.Mv.S.512								1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Oftalmology	MV.Mv.S.513								1	-	1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Dental medicine	MV.Mv.S.514								1		1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	Citologic diagnosis	MV.Mv.S.515								1		1	**C**	**28**	**42**	**1**	**28**	**42**	**1**
	TOTAL II									**1**	**-**	**1**	**1C**	**28**	**42**	**1**	**-**	**-**	**-**
	TOTAL I + II		**13**	**-**	**16**	**6E+ 1C**	**406**	**588**	**26**	**14**	**1**	**15**	**5E+4C**	**510**	**706**	**34**	**916**	**1294**	**60**
			29							**30**									
	III.FACULTATIVE (AT REQUEST)																		
12	Foreign languages	MV.M.v.C.515	-	2	-	**C**	**28**	**28**	**2**	-	2	-	**C**	**28**	**28**	**2**	**56**	**56**	**4**

Note: number of conventional hours = (Cx2 + S + L + Pr)x14

VI-th YEAR

Nr. crt	Discipline	Code	Sem. 1 – 14 weeks							Sem. 2 – 7 weeks							Total phis hrs.	Total Conv hrs	No cred
			C	S	L	E/C	Phis hrs	Convhrs	Nr.cred.	C	S	L	E/C	Phis hrs	Convhrs	Nr.cred.			
0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
I. SPECIFIC COMPULSORY MATTERS																			
1	Forensic medicine	Mv.01.O.S.11.601	2	-	3	***E***	**70**	**98**	**6**	-	-	-	-	**-**	-	**-**	**70**	**98**	**6**
2	Pharmacy	Mv.01.O.S.11.602	1	-	2	***C***	**42**	**56**	**3**	-	-	-	-	**-**	-	**-**	**42**	**56**	**3**
3	Legislation and veterinary deontology	Mv.01.O.S.11.12.603	1	1	-	**-**	**28**	**42**	**-**	1	-	-	**C**	**7**	**14**	**5**	**21**	**42**	**5**
4	State veterinary medicine and public health	Mv.01.O.S.11.604	1	-	1	**E**	**28**	**42**	**3**	-	-	-	**-**	**-**	**-**	**-**	**28**	**56**	**3**
5	Clinics of companion animals	Mv.01.O.S.11.12.605	1	-	4	**E**	**70**	**84**	**6**	-	-	3	**C**	**21**	**21**	**4**	**91**	**105**	**10**
6	Clinics of large animals	Mv.01.O.S.11.12.606	1	-	4	**E**	**70**	**84**	**6**	-	-	6	**C**	**42**	**42**	**5**	**112**	**126**	**11**
7	Clinics of suine and poultry	Mv.01.O.S.11.12.607	1	-	2	**E**	**42**	**56**	**6**	-	-	3	**C**	**21**	**21**	**5**	**77**	**91**	**11**
8	Food safety	M.v.01.O.S.11.607	1	-	1	**C**	**28**	**42**	**3**	-	-	-	**-**	**-**	**-**	**-**	**42**	**70**	**3**
9	Practical training (7 weeks., 3 for licence)	Mv.01.O.S.12.609	-	-	-	-	**-**	**-**	**-**	-	-	-	**C**	**210**	**210**	**6**	**210**	**210**	**6**
	TOTAL I		**9**	**1**	**17**	**5E+2C**	**378**	**504**	**33**	**1**	**-**	**12**	**5C**	**301**	**308**	**25**	**679**	**812**	**58**
					26							**13**							
II.OPTIONALS (AT CHOICE)																			
10.	Biotechnics of reproduction	Mv.01.A.S.11.610	1	-	2	***C***	**42**	**56**	**2**	-	-	-	-	**-**	**-**	**-**	**42**	**56**	**2**
	Laboratory diagnosis	Mv.01.A.S.11.611	1	-	2	**C**	**42**	**56**	**2**	-	-	-	-	**-**	**-**	**-**	**42**	**56**	**2**
	Orthopedy	Mv.01.A.S.11.612	1	-	2	**C**	**42**	**56**	**2**	-	-	-	-	**-**	**-**	**-**	**42**	**56**	**2**
	Project management	Mv.01.A.C.11.613	1	-	2	**C**	**42**	**56**	**2**	-	-	-	**-**	**-**	**-**	**-**	**28**	**42**	**2**
	Total II		1	-	2	1C	**42**	**56**	**2**								**42**	**56**	**2**
	Total I + II		**10**		**19**	**5E+3C**	***420***	**560**	**35**	**1**	**-**	**12**	***5C***	**301**	**308**	**25**	**721**	**868**	**60**
				29						**13**									
	Licence exam (2 weeks) - assay **I** = **5 credits** - assay **II** = **5 credits**																		**10**

Note: number of conventional hours = (Cx2 + S + L + Pr)x14

The curriculum is established at the beginning of each academic year by the Professional Commission of the Council of the Faculty and is sealed by the dean, in accordance with the suggestions received from the departments and ratified by the Council of the Faculty. It is evaluated quarterly and is periodically updated according to the EU standards and requests of the labour market of veterinary medicine in Romania.

The course titulars improve and propose the content of the courses and the practical activities (*syllabuses*) to the Faculty Council.

The coordination of the subjects of study within the departments is done through direct consulting, the material for study being limited to the strict necessities of the subject, in order to avoid overlapping with other subjects, thus avoiding the repetition of information along the year.

The total number of courses and subjects in the 6 years is 96, of which 62 are compulsory, 22 are optional and 12 are facultative *(Table 5.2)*.

Table 5.2

Study subjects (courses) at FMV Iasi,
2009/2010 academic year

CATEGORY	*NUMBER*
Compulsory	*62*
Optional	*22*
Facultative	*12*

The teaching process aims at a gradual, logical pattern which ranges from simple to complex, from theory to practice. The fundamental subjects ensure the basic knowledge for the preclinical subjects which will make the transition to the clinical ones.

The teaching methods are permanently improving: conferences, computer-assisted education (PowerPoint), video, case studies, and debates.

In order to improve the quality of the courses, they were structured on a more practical and informative pattern, which made them more attractive. The modern presentations use audio and video techniques. The PowerPoint presentations, study algorithms are frequently used methods.

In order to consolidate the practical abilities of the students, there are collaboration treaties with other veterinary institutions, such as the Department of Veterinary Sanitation and Food Safety Iasi, veterinary surgeries, nearby farms, factories of food processing, private veterinary clinics etc. *(Tables 5.3, 5.4, 5.5, 5.6)*

Table 5.3

Collaborating diagnosis laboratories

No. crt	*Laboratory*	*Headquarters*
1	DSVSA* Iasi	Iasi, Aleea M. Sadoveanu, 10
2	DSVSA Bacau	Bacau, Bucovinei, 21
3	DSVSA Vaslui	Bîrlad, Trestiana, 2
* DSVSA=Sanitary Veterinary and Food Safety Direction		

Table 5.4

Collaborating farms

Nr. crt	*Farm*	*Species*	*Headquarters*
1	Deposit Stallions *Dumbrava*	Equine	Dumbrava, com. Timisesti, jud. Neamt
2	SCDCB *Dancu*	Bovine	Holboca, Soseaua Iasi-Ungheni, jud. Iasi
3	SC TCE *Trei Brazi*	Bovine	Zanesti, jud Neamt
4	SC *Suinprod* SA	Porcine	Roman, Soseaua Stefan cel Mare, 336
5	SC *Agricola International* SA	Porcine	Bacau, Calea Moldovei, 24
6	SC *Avi Top* SRL	Poultry	Iasi, Soseaua Iasi-Tg. Frumos, km 10
7	SC Avi Prod SRL	Poultry	Tomești, jud. Iași

Table 5.5

Collaborating processing factories

Nr. crt	*Factory*	*Specific*	*Headquarters*
1	SC *Romcarn Prod* SRL	Abattoir bovine	Pașcani, Grădiniței, 1
2	S. C. *Kosarom* S.A.	Abattoir porcine	Pașcani, Abatorului, 65
3	SC *Rom Trading Company* SRL	Abattoir poultry	Podu Iloaiei, Soseaua Națională, 1, jud. Iasi
4	. SC *Agricola International* SA	Meat	Bacau, Calea Moldovei, 94
5	SC *Promilch* SRL	Milk	Podu Iloaiei, Soseaua. Națională, 104, jud. Iasi
6	SC *Almera International* SA	Milk	Bacău, Aleksei Tolstoi, 67

Table 5.6

Collaborating veterinary clinics

Nr. crt	*Clinics*	*Owner*	*Headquarters*
1	SC *Univet* SRL	Boghian Dragoș	Iaşi, Fântânilor 11, Iaşi
2	SC *Salvanim* AMV	Stecyk Edmond	Iaşi, Fundacul Gindului, 3
3	SC *Domevet* SRL	Bertea Paul	Iaşi, M. Kodălniceanu, 9
4	SC *Pro Vet* SRL	Lazăr Ovidiu	Iaşi, Smârdan, 93 C

The students are periodically consulted through their representatives in the leading organizations of the faculty regarding their suggestions on the improvement of the didactic activity.

Since 2009, at UASVM Iasi, a 3D programme has been implemented. For FVM several objectives of 3D teaching are developed.

Examples:

1. The animal cell – morphology, function, pathology
    a. 3D cell structures visible on electronic microscopy.
    b. The mitochondria and the energetic metabolism (the mitochondrial respiratory chain).
    c. The mitochondria and the oxidative stress.
    d. Phagocytosis – the nespecific defence towards pathogen microorganisms.
    e. The intracellular flow of genetic information from DNA to protein.
    f. The cellular membrane – structure and function: lipidic layer, proteins, glicoproteins (canals, carriers, receptors, enzymes, cellular drawing molecules, identification markers).
    g. Normal and abnormal cell division.

2. Inflamatory process morphopathogenesis
    a. Inflamation’s essential signs (rubor, tumor, calor, dolor, functio laesa)
    b. Inflamation’s steps:
        I. The inflamation’s alterative phase
            1. Cell changes- active biologyc products
            2. Extracellular matrix changes
        II. The inflamation’s exsudative phase
            1. Hemodynamic changes
            2. Plasma exsudation
            3. Cellular migration
        III. The inflamation’s proliferative phase
            1. Cellular hyperplasia’s inductor factors
            2. Cellular types involved in the hyperplasic phase

3. The mammal eye – morphophysiology, pathology
   a. morphofunctional elements: the eyeball ' s layers, the interior of the eyeball, the exterior of the eyeball, including anexes (eyelids, cilliums, the lacrimal gland);
   b. the image formation on the retina;
   c. photoreceptors sensibilization, day- night seeing; black- white seeing, chromatic seeing;
   d. visual seeing genesis
   e. the adaptation of the eye in light quantites variations
   f. dioptric accommodation (seeing close and far objects)
   g. monocular seeing, binocular seeing fronting the lateral of frontal placement of the eyes; stereoscophic seeing.
   h. The eyeball pathology: ulcerative keratitis; iris staphyloma, cataracts, glaucoma

7. The muscular contraction's molecular mecanism
   a. The calcium release from the intracellular deposits
   b. The reveleance of the actine's active site.
   c. The crossbridge cicle (myosin activated, myosin crossbridge binds to actin molecule, power stroke, detachment, crossbridge binds to more distal actin molecule)
   d. The sliding-filament mechanism of complete muscular contraction
   e. The muscular relaxation: the active regain of calcium in deposits, the detachment of the myosin from the actin) Metabolic pathways of ATP sintesis necessary in the muscular contraction and relaxation

5.1.2. Study environment

The teaching and the auxiliary staff involved in the didactic process benefit from facilities that allow them to improve their pedagogical capacity and specialization level through post-university studies, master and doctorate in our country or abroad. There is a modern library (see chapter 8), there are videoprojection systems in all amphytheatres and other learning spaces- seminars, labs.

The presentation of the Ph.D. theses, the publication of scientific papers or specialized books in foreign languages offer the possibility of promotions. The promotins of teaching personnel is based on research results and scientific publications, and secondary evaluating the teaching abilities performed. At this moment, the excellence in teaching is not recompensed.

The Learning assesment

The learning system is variable, according to the personality of the student, of his or her intellectual abilities and the personal discipline. At FVM Iasi, the evaluating teaching staff stimulates the students for the final assessment through periodical tests which checks the gradual assimilation of the information, after each chapter.
The professor/student relation is a partnership, where each takes on the responsibility of reaching the learning results. The learning results are explained and discussed with the students taking into account their relevance for their development. The course titulars have a consultation programme, posted at the notice board. A *mentor* is appointed for each year of study by the Faculty council. At the Faculty level, there is a *Commission of counselling and career assistance*, whose aim is to support the students in their professional training and solving the life and activity aspects within the university campus. It is made up of the dean, vice-dean and mentors of the years of study. The commission draws up a report that is analysed by the Faculty Council.

The participation of the students at the didactic process is stimulated by keeping a track of their presence at the courses; this grade is taken into consideration at the final evaluation. .

Moreover, as the practical training of the veterinary surgeon is highly important, the practical works that were missed are obligatory taken during the spare time of the student and under the supervision of the young academic staff, till the end of the semester and before the final evaluation.

5.1.3. Assessment system

The Faculty has general policy of examination, decided by the Faculty Council. There are two ordinary exam sessions (3 or 4 weeks each one) and two supplementary sessions (one week each one). Three re-examinations are allowed for each exam. Each discipline allocate time for exam, till all these possibilities are exhausted.

The assessment of the knowledge is done in a decimal system, with marks from 1 to 10, mark 5 being the lowest acceptable for passing the examination.

The final assessment is made in two ways: colloquy and exam.

As for the *colloquy*, the final mark is made of the arithmetic average of 4 or 5 tests for each student along the semester, the mark being decided in the last week of the didactic programme of the semester (14th week).

The colloquy assessment is done at the subjects with a relatively small number of credits.

At the subjects with exam assessment, the final mark is made of: the average of the periodical tests – 20% (maximum 2), mark for course attendance – 20% (maximum 2), mark for the final examination – 60%. The main examination is oral at most of the subjects or written, such as multiple choice tests.

Example:
A student with attendance of 10 courses out of 14 (grade 1,4),with the average grade of the test during the semester-5 (grade 1) will enter the final examination with the grade 2,4. T this grade it is added that of the final examination, for example 6, and the final grade of the student is 8.

5.1.4. Evaluation of the academic staff by the student

At the end of each semester, during the last course or seminar, all the academic staff are evaluated by the student, by filling in a questionnaire drawn up by a group of professors and approved by the Senate of UASV Iasi.

Questionnaire used in 2009/2010 academic year:

Evaluation Chart This chart has as main purpose the assessment of the academic staff's activity and that is why we request your objectivity and sincerity. We guarantee the confidentiality of the declared. Please fill in the chart with your appreciation for the evaluated academic staff as follows: **A**: very good / yes **B**: good / better yes **C**: acceptable/ more or less acceptable **D**: weak/ rather not **E:** very weak / no ***The evaluated professor:*** .... ***Subject taught:*** .... 1. Is the professor punctual to the courses? .... 2. Does the professor entirely use the time for explaining the issues of the subject? .... 3. Are the professor's explanations clear? .... 4. Does the professor organize well the activities during the courses/ practical works/ seminars?	15. After studying this discipline, has your interest for the domain increased? .... 16. Were you presented and are the aim and utility of the subject clear for your training during university? .... 17. How do you appreciate the level of professional competence of the titular of the course, seminar, laboratory activities, or project? .... 18. How do you appreciate the rhythm of the presentation, taking into consideration the aids of teaching? .... 19. Were you presented the criteria of appreciating and grading the students? .... - if the answer is „A" or „B" write the moment of their mentioning: at the beginning/ along/ at the end of the semester .... 20. What was your participation in the courses and involvement in the seminars, practical works, projects? course .... seminars/ practical works/ projects…...................................... **Please add comments and suggestions** regarding: the structure of the questionnaire, subject content, way of teaching etc. ....

5. Do courses/ practical works/ seminars contain updated, relevant information? .... 6. Do courses/ seminars also contain results of the professor's own scientific research? .... 7. Does the professor teach passionately and interestingly? .... 8. Does the professor encourage the students' participation during the classes and does he answer the students' questions promptly? .... 9. Does the professor evaluate the students correctly/ impartially/ transparently? .... 10. Does the recommended bibliography help for a better understanding of the subject? .... 11. Are you satisfied with the methods used for making the learning of the taught subject easier? .... 12. Are the used means of teaching modern? .... 13. Does the professor use practical/ real examples? .... 14. Does the professor have consultation hours, does he really help during these hours?	.... ***At the end, some information about yourself:*** Specialization: .... Year of study: .... Sex: .... Average grade of the previous year: a) 5 – 6; .... b) 6 – 7; .... c) 7 – 8; .... d) 8 – 9; .... e) 9 – 10 ....

The results of the evaluation are analysed by the Professional commission of the Faculty council and are communicated to the academic staff that have to set the teaching or behaviour issues right.

5.1. 5. Student well being

The faculty has a hostel for students with a capacity of accommodation of 500 places, a restaurant, two gyms, four sports grounds for football, handball, basketball and tennis. All hostels has internal policy according the senate decisions, in order to protect against diseases the students and physical incidents, being permanently under bodyguards supervising.

As for the students with social problems, the faculty offers social scholarships, material support, fee free, study and leisure trips.

The students with the best results (number one students of each year of study and of each faculty within UASVM Iasi) are offered an 8 days summer excursion in Greece, paid by the University.

5.2. Comments

We consider that the syllabus drawn up by our Faculty is well-structured, of high quality, corresponding to the present requirements of veterinary medicine from Romania and the European Community.

The curriculum comprises both traditional and dynamic elements, imposed by the continuous evolution of the informative domain. The external examiners are useful only for the subjects where they are offered the opportunity to collaborate with the students for a longer period of time. The round tables or conferences are useful for the students, but the assessment based only on these activities would be insufficient.

The students' taking part in the drawing up of the courses and syllabi is profitable as long as it is done by students who are motivated, really interested and dedicated to the faculty and to their future profession.
We consider that the evaluation system is in favour of the active involvement of the student in the educational process and his continuous training along the semester.

5.3. Suggestions

In order to reduce the time for examination and increase the efficiency and objectivity of the exam, there will be taken into account the logical medical thinking as well as the accuracy, clarity and concision of the answer, understanding of the phenomenon and not its mechanical memorization.

Along the semester, the students will be drawn into a continuous learning process through seminars, presentation of projects on different themes of general interest, presentation of clinical cases, working groups.

The quality of the teaching process can be improved through:

- interactive courses, dialogues where the student can be more than a listener
- avoiding information repetition and overlapping
- alternative use of different techniques to facilitate the students' receptivity

- development of logical pragmatic creative thinking from the very period of preclinical studies, through the presentation of the clinical significance of each basic notion
- development of managerial abilities of the future vets
- achievement of a reasonable plan of academic mobility and information circulation through information networks
- veterinary studies in foreign languages

The evaluation should be complex, but not complicated with the purpose of making the evaluation objective and precise.

Even if the effort of the evaluator is high, we will insist on using the oral evaluation starting with the 1st year of studies in order to intensify the direct contact between students and professor and to emphasize on the affective component of the academic community.

CHAPTER 6

FACILITIES AND EQUIPMENT

6.1. FACTUAL INFORMATION

6.1.1. PREMISES IN GENERAL

The Faculty of Veterinary Medicine Iasi functions both in its own areas as well as on premises common to those of other faculties within "Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine Iasi (UASVMI). Its campus stretches on about 20 hectares, in the north part of Iasi Municipality, on both sides of Aleea M. Sadoveanu, nr. 3-8 (See the Map, Appendix I). In Building A of the University (Agronomy) there can be found Amphitheatre A1 with 216 seats for the students of FVMI, and other spaces for seminars and practical activities or supervised activities with students for subjects such as Bio-statistics and computer science, Biophysics, Agronomy, Management, marketing and economic administration, Foreign languages.

In Building C of the University (Chemistry), within the Department of Chemistry of UASVMI, FVM has areas for subjects as Chemistry and Biochemistry. In the same building (C) and in its extension (B) there is situated the Central Library of UASVMI, recently modernized and at the disposal of all the students of the university.

In Building M of the University (Mechanization), the Laboratory of 3D Advanced Visualization is to be found. On the same premises there is under construction a new building (AT) intended for higher training in technology of processing agricultural products, where the students at veterinary medicine will have access (See Appendix I).

The Dean's Office and the Secretariat of the faculty are in the main pavilion of the FVMI, identified as P1, situated on the right side of Aleea M. Sadoveanu, nr. 8, which is also used by the Faculty of Animal Husbandry Iasi (FAHI). Our students can use our own areas for subjects such as Veterinary anatomy, Ichthyopathology, Physiology and Physiopathology, Animal husbandry and animal production, Animal nutrition, Genetics, as well as an Amphitheatre with 128 seats (A1 VM) (See Appendix II, P1.-1_P1.4.).

On the first floor of the pavilion 2 (P2.0) there are the Clinics of Surgery and Obstetrics for large and small animals, the Emergency service and the Hospital for small animals. On the same floor, there is also the Room for Artificial Insemination within the Animal reproduction department (Appendix III.P2.0).

On the second floor of the Pavilion 2 (P2.1) there can be found areas for subjects such as: Animal reproduction, Cellular biology, histology and embryology, Immunology, Food technology, Food safety, Molecular biology (Appendix III.P2.1).

The Pavilion 3 (P3) is made of two segments, P3.A, where a Didactic and research laboratory for Virology, together with a Laboratory of animal experimentation of 2nd and 3rd security level are under construction, and P3.B, designed for hospitalizing large and medium animals operated on. Moreover, in P3.B the centre for vaccination is also present (Appendix III.P3.).

In the Pavilion 4, on the first floor (P4.0), the Medical and Parasitological Clinic functions with its rooms for consultations and treatments, Laboratory of clinic diagnosis, as well as the Radiology service. On the same floor, it is also the veterinary pharmacy (Appendix IV.P4.0).On the second floor of the Pavilion 4 (P4.1) there are the rooms of the subjects of Pharmacology, Vet. hygiene & environmental protection, Animal biology and parasitology, Veterinary epidemiology, and documentation centre (Appendix IV.P4.1).

Pavilion 5 is used, in Segment A, for Triage (reception) of the cases, a room for the subject of Semiology and Hospitalization of farm animals, afferent to the clinics of internal diseases and parasitology (Appendix IV.P5.A). The Segment B of P5 was reconstructed and it became a Didactic and research laboratory for food safety, and at present it is being equipped (Appendix IV.P5.B).

All these pavilions communicate through a main hall and a connecting one, but at the same time, having independent access from the outside.

Pavilion 6 (P6), placed right next to the campus and separated by the other buildings, ensures areas for subjects as Pathological Anatomy, Forensic medicine and necropsy, Animal microbiology and infectious diseases. In the same pavilion there can also be found a Laboratory of histopathological diagnosis and Laboratory of infectious diseases diagnosis, as well as the Hospital for infectious diseases (isolating room) (Appendix V.P6).

Pavilion P.7 has areas for breeding lab animals (mice, guinea pigs, rabbits etc) and annex buildings for poultry (collection), but it requires improvement.

On the P.8 premises there is under construction the new Equine base of the university, which should be finished by the end of this academic year.

On P.9 premises there can be found the installations for evacuating and washing away the wastes, the Platform of farmyard manure, incinerator and Station of fluid cleaning. On the north part of the campus, it is the headquarters of SVDFS and the Laboratory of sanitary veterinary diagnosis Iasi.

6.1.2. PREMISES USED FOR CLINICS AND HOSPITALIZATION

Table 6.1: Places available for animal hospitalization

	Species	No. places
Regular hospitalization	Cattle	12
	Horses	9
	Small ruminants	12
	Pigs	10
	Dogs	20
	Cats	24
	Others* rabbits + poultry	76+2000
Isolation facilities	Farm animals and horses	9
	Small animals	10
	Others* rabbits + poultry	10+100

*Specify the species.

6.1.3. PREMISES FOR ANIMALS

On the premises of the Experimental didactic station UASVMI had a mixed zootechnical farm, which was dissolved because of the land reforms in Romania, the land being given back to the original owners. Under these conditions, the didactic activities regarding animal breeding, health of the effectives and the techniques of manipulation the animal production take place in private farms which have collaboration conventions with our university.

Thus, for the practical training activities in bovine breeding, our students have access to Dancu Station of Bovine Research and Production, with an effective of about 500 bovines, situated in Dancu commune, 9 km away from the faculty. Students can arrive there by the buses belonging to the university or by tram.

The faculty also collaborates with bovine farm of Voinesti, situated at 10 km from the faculty, with Vladeni farm, situated at 30 km from Iasi. The visits to these farms are made periodically, with small groups of students, especially for evaluating the health state of the effectives.

The study visits and the organized practice are also done at the farms of S.C. DORNA S.A., in Suceava county (Saru Dornei village), situated at 250 km away from Iasi. At present, our university is building a permanent centre for practice, with a capacity of 60 places per series, which will be finished this year and which will improve the conditions of the professional training of our students.

For the practical activities regarding the porcine breeding, the situation is similar, there are visits to the SUINPROD farm from Roman, Neamt County, situated at 80 km away from Iasi and SC MARCEL SRL farms from Mircesti (70 km away from Iasi). As for poultry breeding, visits are organized to farms of S.C. AVICOLA S.A. and S.C. AVITOP S.A. Iasi (6 km away) and Razboieni commune (40 km away).

For caballine breeding and equitation, the university has an equine centre, on whose premises there is under construction a modern base placed in the north part of the campus (P.8).

As for ovine and goats, Iasi area does not have farms for their breeding. Thus, the students visit the Research farm of Popauti, Botosani County (150 km).

6.1.4 PREMISES USED FOR THEORETICAL, PRACTICAL AND SUPERVISED TEACHING

Table 6.2: Premises for clinical works and student training

Small animals	no. consulting rooms	5
	no. surgical suits	4
Farm animals	no. consulting rooms	3
	no. surgical suits	2
Others*	Ichthyopathology	1

* Specify the species.

Table 6.3**. Premises for lecturing**

Nr. Crt.	Name of the hall	Building	See Annexes/Plan	Seats	Observations
1	A 1	A	I	216	
2	A 1 MV	P1	II.P1.0	128	
TOTAL SEATS				344	

Table 6.4**. Premises for group work (Number of rooms that can be used for supervised group work)**

No. Crt.	Name of the hall	Building	See Annexes/ Plan	Seats	Observations /Destination
1	BIF	A	I	24	Biostatistics and informatics
2	FLANG	A	I	20	Foreign languages
3	AGR	A	I	16	Agronomy
4	MAN	A	I	18	Management, marketing and economic administration
5	ICHT	P1	II.P1.-1	18	Ichthyopathology
6	ANAT 1	P1	II.P1.0	20	Veterinary anatomy
7	ANUTR	P1	II.P1.3	18	Animal nutrition
8	GEN	P1	II.P1.3	16	Genetics
9	ANIMP	P1	II.P1.4	12	Animal breeding, Animal production
10	MB	P2	III.P2.1	12	Molecular biology
11	REPR 1	P2	III.P2.1	18	Reproduction
12	HIST	P2	III.P2.1	15	Cell Biology, histology and embryology
13	FTH	P2	III.P2.1	12	Food technology and hygiene
14	MED 1	P4	IV.P4.0	15	Internal medicine and clinic
15	HYG	P4	IV.P4.1	15	Veterinary hygiene, Ethology, animal protection, Food inspection and control
16	PAR 1	P4	IV.P4.1	15	Animal biology, Parasitology and parasitic diseases
17	EPID	P4	IV.P4.1	16	Epidemiology , State veterinary medicine and public health
18	TOX	P5	IV.P5.0	16	Toxicology
19	APATH	P6	V.P6.0	16	Pathological anatomy
20	INF 1	P6	V.P6.0	15	Infectious diseases and preventive medicine
TOTAL SEATS				327	

Table 6.5. **Premises for practical work (Number of laboratories for practical work by students)**

No. Crt.	Name of the hall	Building	See Annexes/ Plan	Seats	Observations/ Destination
1	BPH	A	I	18	Biophysics
2	CH	C	I	20	Chemistry, Biochemistry
3	ANAT 3	P1	II.P1.-1	15	Veterinary anatomy (Osteology)
4	ANAT 2	P1	II.P1.0	20	Veterinary anatomy (Dissection)
5	PHYS1	P1	II.P1.2	18	Physiology, Pathophysiology
6	PHYS2	P1	II.P1.2	20	Physiology (in common with FZI)
7	REPR 2	P2	III.P2.0	16	Animal reproduction 2(Artif Insem..)
8	SPROP	P2	III.P2.0	16	Surgical propaedeutics and anaesthesiology, Therapeutic
9	SURG 1	P2	III.P2.0	18	Surgery, - Large Anim.
10	SURG 2	P2	III.P2.0	8	Surgery, - Med. Anim
11	SURG 2	P2	III.P2.0	20	Surgery, - Small Anim (4 rooms)
12	DENT	P2	III.P2.0	5	Dentistry
13	OBST	P2	III.P2.0	16	Obstetrics, Reproduction pathology, Clinic of farm animals
14	URG	P2	III.P2.0	4	Emergency
15	IMM	P2	III.P2.1	15	Immunology and immunopathology
16	FIC	P2	III.P2.1	20	Food inspection and control, Legislation and veterinary deontology
17	VACC	P3	III.P3.B	4	Preventive med.- vaccination
18	MED 2	P4	IV.P4.0	18	Internal medicine and clinic, Clinic of large animals
19	PAR 2	P4	IV.P4.0	12	Parasitology (clinic).
20	MED 3	P4	IV.P4.0	15	Internal medicine and clinic, Clinic of companion animals
21	PHARM	P4	IV.P4.1	20	Pharmacology , Pharmacy
22	SEM	P5	IV.P5.A	16	Semiology
23	ALIMS	P5	IV.P5.B	12	Alimentary security
24	LMED	P6	V.P6.0	15	Legal medicine (Necropsy)
25	MICRO	P6	V.P6.0	16	Vet. Microbiology
26	INF 2	P6	V.P6.0	15	Infectious diseases clinic, Porcine and poultry clinic
TOTAL SEATS				392	

At the university level, there is an Office of Labour Security and Health which functions according to the Law no. 319/2006 (Law of labour security and health), coordinated by a commission decided by the Senate of the university and permanently managed by an appointed person who collaborates on a contract with a specialized company in LSH (S.C. METATEC-CD S.R.L., Iasi). This evaluates the risks and applies the specific legislation within the university, in all the faculties, sectors and services. The University, as responsible juridical organization, ensures all material conditions for applying the LSH legislation.

For the students' activity, the general and specific norms of LSH are defined, the students having individual charts of LSH and being periodically trained (twice a year) or whenever the activity changes (clinics, stages, visits to slaughterhouses etc.) The periodical training is done by professors appointed by the respondents of the laboratories for each year of study.

In the clinics and laboratories, for the didactic activity, the students use their own adequate protection equipment (overalls, caps etc.) and on the special premises of high risk (necropsy, isolation room, diagnosis laboratories, farms etc.), the faculty or the enterprises provide the students specific equipment of protection (overalls, combination suit, boots, gloves etc.).

In all the clinics and laboratories there are adequate conditions and materials to ensure the hygiene of the premises, students and personnel (washstand, detergent, decontaminating solutions, showers etc.)

The university ensures the preventive medical assistance for students and employed personnel by an expert in labour medicine and a general physician.

6.1.5. DIAGNOSTICS LABORATORIES AND CLINICAL SUPPORT SERVICES

• Diagnostic laboratories

The activity of clinical and paraclinical diagnostic is ensured by laboratories belonging to the specialty disciplines of the faculty and is used both for training and external cases.

Thus, the faculty hosts the following diagnostic laboratories:

1. Laboratory of paraclinical diagnostic: haematological and biochemical analyses ;
2. Laboratory of parasitological diagnostic: identification of internal and external parasitic agents;
3. Laboratory of mycology and mycotoxicology: qualitative and quantitative mycological and mycotoxicological examinations of feed and animal origin products;
4. Laboratory of pathological anatomy: histopathological exams, cytopathology;
5. Laboratory of microbiology and infectious diseases: bacteriological exams, antibiogram, ELISA, immunofluorescence, PCR etc.;
6. Laboratory of food microbiology: classic food bacteriology, PCR.

The consolidation of these laboratories, the equipping with apparatus and instruments, all were done from 2007 to 2009, due to investments obtained by our university from the Ministry of Education, our own funds and research funds. Starting with 2009, because of the financial crisis of Romania, the resources were much diminished and the modernizing process, including the one for the accreditation of these laboratories, was slowed down and prolonged.

• **Clinical support services**

The services used for the clinical activity of the faculty have several facilities. The first is the Radiology unit, which performs radiological and radioscopic diagnostic on small and large animals, all the conditions of functioning and security respecting the standards. This unit is totally managed by the faculty and provides both the students' training and services for external clients. The same unit will be provided with an endoscope.

The diagnostic imaging is provided by two echographs that function in the medical and reproduction clinics.

In the medical clinic there functions a cardiograph and laser therapy equipment, while the surgery clinic offers dentistry service for small animals.

The ambulatory clinical activity is ensured, for the time being, by a vehicle of 5 seats and space for a medical emergency kit. We have neither a vehicle for transporting the sick animals nor an adequately equipped mobile clinic; in fact, these are the objectives proposed for the development plan of the faculty, but unaccomplished because of the latest financial restrictions.

The Emergency Service has an area, which includes an emergency room and two rooms for internalization and intervention, which are still not adequately equipped because of the same financial reasons.

6.1.6. SLAUGHTERHOUSE

Due to the major economic changes of Romania and the necessity to align the Romanian enterprises to the European standards, both the number of the slaughterhouses and processing enterprises of animal origin foodstuffs highly diminished in Iasi region. This affects the students' practical activity in this domain. Our faculty has access to visit the porcine slaughterhouse of S.C. Kosarom S.A. from Pascani (70 km away from Iasi), and S.C. MARCEL S.R.L. slaughterhouse from Mircesti (70 km away), S.C. ROMTRADING S.A. from PODU ILOAIEI (40 km away from Iasi poultry slaughterhouse, SC ROMCARN PASCANI (70 km away from Iasi) for bovine slaughterhouse.

6.1.7 FOODSTUFF PROCESSING UNIT

The processing enterprises from Iasi region are also few, which creates difficulties in the students' training and forces us to organize visits to enterprises situated at great distances from the faculty. (see chapter 4).

At the end of the academic year, the 3rd year students have 3 weeks of supervised practice in centres from the nearby counties, in collaboration with the Sanitary Veterinary Centres of those counties (Suceava, Botosani, Vaslui, Bacau), where they visit and perform specific activities in slaughterhouses and processing enterprises (see chapter 5, table 5.5.).

6.1.8. WASTE MANAGEMENT

The infested biological wastes (microbial cultures, infectious samples, plastic syringe, gloves etc.) are first autoclaved and then destroyed by incineration.

The chemical wastes and toxic solutions resulted from the activities in laboratories and clinics are collected in special recipients, autoclaved and neutralized when needed and then taken by a specialized and authorized company for destroying the chemical wastes (S.C. CHEMICAL COMPANY S.A. from Iasi).

The corpses from necropsy animals, dissected anatomical parts, remains of organs and products of animal origin used or remained from the didactic or diagnostic activity are put into adequate plastic recipients and transported to our own incinerator (situated on P9 premises, See Appendix I) for destruction.

The animal excrements (solid part) from the clinics are collected and transported to the waste premises of the faculty (situated on P9 premises, See Appendix I) where they are stocked for 6 months for natural fermentation, after which they are taken by the utility services of the town (SALUBRIS S.A.) and transported to the cesspool of Iasi. We have services contract for the non-toxic wastes from the campus with the same company.

The fluid dejections (purine) are collected by our own sewage system and taken to the clearing station of the campus (situated on P9 premises, See Appendix I), for proper treatment and after that overflowed in the public sewage network.

As for the interned animals with infectious diseases, transmissible by dejections and with spreading risk, they are collected in separate bags, treated chemically and thermally (according to case and quantity) and incinerated.

The cleaning station (P9) is used for the whole university and is made up of a cleaning basin, specific technological equipment, a laboratory and storage area. It is in accordance with the legislation on environmental protection (it does not pollute), human hygiene and safety, fire security. The station ensures the pre-cleaning of the effluents from all the premises of FVMI by treating them in two stages – mechanically and biologically, with a capacity of 450 cm per day. The used pre-cleaned waters resulted are directed to the public network of used waters, following the concentration of evacuated polluting agents, according to NTPA 002/2002, GD 352/2005.

The crematory (see P9) has been recently built and respects the legal standards, being used for incinerating animal wastes (corpses, remains from slaughterhouse etc.), materials of high risk, wastes from analysis laboratories. All are burnt at adequate temperature and noxious emissions (gases, ashes) following the regulations of the Ministry of environment. The incineration takes place in four stages, treating the wastes at temperatures from 100°C (drying) to 1100°C (gases post-combustion), the resulted ashes being inert and sterile.

6.1.9.FUTURE CHANGES

The problem of consolidating and modernizing the premises and materials of FVMI has been a permanent preoccupation of the managers of the faculty and university. In the last 20 years, our university and faculty have undergone many changes, sometimes syncopated, as most universities from Romania. The adopted strategy and sustained efforts made most of the modifications be accomplished especially in the “good” financial periods.

Thus, we mention the consolidation and modernization of Pavilion C (Chemistry) and B (Library). The consolidation of Pavilions P1, P2.0, P4 and P6 of FVMI was finished, but equipment is needed, especially for the clinics.

The food safety laboratory, finished in pavilion P.5.B. is functional but needs furniture and necessary equipment. The domain of food technology will be at a higher level once the AT premises of the university have been finished (see Appendix I), where our students will have adequate conditions for training in food quality and processing.

The didactic and research laboratory for Virology and Animal Experimentation of 3rd degree, whose project was approved and whose construction stopped because of financial reasons, must be finished as it will ensure higher standard for training and research in this field.

On the same premises, there is the Equine base, which is under construction. It will be of high importance for our students’ training.

One last objective proposed but which remained in the project stage because of the financial problems is the consolidation and modernization of the University Veterinary Hospital with its premises: P3.B and P5.A.

6.2. Comments

Generally, the premises of FVMI comply with the training activity of veterinary surgeons and the result of the undergoing or proposed projects (e.g. the hospital) will facilitate a better redistribution of the areas and a higher efficiency of the didactic and research activities.

As for the equipment, we can state that it is appropriate, at least for teaching courses, seminars, supervised activities, fundamental subjects, preclinics, and paraclinics. However, we have incomplete equipment for the clinical activities and disciplines, the local or ambulatory ones, and for the food safety and technology.

The maintenance of the premises and equipment is carried out in good conditions, by the administrative and technical services of the university or by contracts with service providers, according to the degree of complexity of the needed intervention.

6.3. Suggestions

- Finishing as quickly as possible the equipping of the clinics and emergency services.
- purchasing an adequately equipped vehicle for the “Mobile clinic” and one for transporting the sick animals;
- reconstruction and modernization of the Veterinary Hospital;
- construction of a mixed zootechnical farm.

CHAPTER 7

ANIMALS AND TEACHING MATERIAL OF ANIMAL ORIGIN

7.1. General information

The Faculty of Veterinary Medicine Iasi uses in the teaching process animals hosted in our own hospitalization facilities (small and large ruminants, equine, companion animals such as cats and dogs, rabbits and domestic animals), animals from the farms near Iasi and other didactic materials of animal origin. We also mention the normal or pathological anatomic collections and preparations, as well as materials of animal origin used at subjects of animal hygiene and technology, food inspection and veterinary sanitary control.

From 1960 to 1990, the Faculty of Veterinary Medicine used the premises and the animals of the Experimental Didactic Station Rediu, which belonged to the Agronomical University of Iasi. The farm had various species of animals such as cattle, ovine, equine, porcine and poultry. The social changes after 1990 led to the loss of the agricultural land and drastic reduction of the number of animals.

Detailed description

7.1.1. ANATOMY

For the practical teaching, the subject of Anatomy of Domestic Animals uses as didactic material the domestic animals and various parts of animal body such as: bones, joints and organs.

Projections, drawings and videos are used for didactic purposes.

Alive or preserved animals are used for the study of muscles, blood vessels (arteries, veins and lymphatic vessel), nervous system and topography of organs of horses, donkeys, sheep, dogs and rabbits.

During the laboratory classes there are used bones of various species as well as fresh or preserved organs.

Besides all these materials, the subject also has a representative museum that contains many well-preserved items.

7.1. Material used in practical anatomical training

	dog		ruminant		equine		cat	
	2009	2008	2009	2008	2009	2008	2009	2008
Live animals	9	11	24	29	29	27	10	14
Cadavers	6	5	12	9	7	8	6	6
Preserved pieces	1	2	1	1	1	2	1	3
Ultrasound/radiology	6	9	8	7	-	1	1	12
Computer assisted teaching	1	1	-	-	-	-	1	1

Bone collection

	Tars (Sets)	Phalange 1	Phalange 2	Phalange 3	Hip-bones	Femur	Tibia and splint bones
Horse	20	20	20	20	30	30	30
Large ruminants	20	20	20	20	20	20	20
Ovine and caprine	30	20	20	20	30	30	30
Porcine	10	10	10	10	30	30	30
Dogs	5	10	10	10	30	30	30
Cats	-	-	-	-	10	10	4
Rabbits	-	10	10	10	40	10	40

Bone collection

	Carcasses	Skulls	Mummies	Scapula	Humerus	Radius and ulna	Carpal bones
Horse	-	10	1	30	30	30	10
Donkey	-	-		2	2	2	2
Cow		15		30	30	30	30
Buffalo	-	-	-	-	-	-	-
Llama	-	-	-	-	-	-	-
Sheep	-	15	-	50	50	50	5
Goat	-	4	-	10	10	10	2
Pig	-	20	-	30	30	30	4
Dog	-	10		20	20	20	2
Deer	-	10	-	40	40	40	5
Bear	-	-	-	6	6	6	2
Wolf	-	-	-	-	-	-	-
Rat	--	-	-	-	-	-	-
Goose	-	5	-	5	5	5	-
Lion	-	-	-	-	-		-
Cat	-	4	-	10	10	10	-
Duck	3	2	-	5	5	5	-
Fox	1	-	-	2	2	2	-
Rabbit	5	20	-	30	30	30	5

Bone collection

	Cervical vertebrae	Thoracic vertebrae	Lumbar vertebrae	Sacrum	Robs	Articulations
Horse	50	50	50	5	50	100
Large ruminants	50	50	50	5	50	
Sheep and goats	30	40	35	5	80	
Pig	20	30	20	1	20	
Dog	20	25	30	10	60	
Cat	8	14	6	2	6	
Rabbit	30	50	45	4	10	

Anatomical preparations preserved in formalin

	Head	Intestines	Head sections	Lungs	Urinary system	Genital system	Heart
Horse	3	4	4	4	6	6	6
Large ruminants	1	4	4	4	6	6	4
Sheep and goats	4	6	4	4	4	4	4
Pig	2	4	4	4	4	4	2
Dog	2	4	4	4	4	4	7
Cat	2	4	**2**	4	4	4	1
Rabbit	2	4	4	4	4	3	2

All the animals used for dissection are clinically healthy, invalid or wounded (dogs and cats with fatal diagnosis) and do not show signs of infectious diseases.

All animals are euthanized, following the requirements for pain relief. For euthanasia, there are used substances especially designed for this purpose.

The bones and organs come from: different animals used as didactic material (horses, donkeys, dogs, rabbits), euthanized animals (companion animals, dogs and cats that the owners no longer want to keep them, animals suffering from chronic, non-treatable and non-contagious diseases) and farm animals (cows, pigs, sheep, rabbits and poultry). The bones and organs are prepared by special techniques for anatomic study or preserved by formaldehyde treatment. The fresh carcasses for dissections are kept in freezers all the period of use. The organs are preserved in containers (different types of pots and basins), filled with formaldehyde 10%, being very well washed with water before their use in laboratories. The technology of bone preparation comprises all the stages: cleaning, washing, bleaching and fat removal with various chemical substances (hydrogen peroxide), after which they are kept in a special room, being also used as didactic materials. During an academic year, for 132 students there are used 25-35 invalid horses, 40-50 sheep, 6-10 dogs, 20-30 rabbits and a variable number of cats (10-25). These animals are purchased by the university /faculty or are obtained from sponsors or donations.

7.1.2. Pathology

Table7.2. Number of necropsies over the past three years

Species		Number of necropsies			Average
		2009	**2008**	**2007**	
Large / farm animals	**Bovine**	4	14	6	150,1
	Small	8	12	4	
	Porcine	697	479	127	
Equine		13	11	4	9,3
Poultry		528	339	161	342,6
Rabbits		2	16	3	7,0
Fish		85	116	79	93,3
Wild animals		8	5	3	5,3
Small/ companion animals	**Dogs**	79	139	48	55,3
	Cats	31	24	11	

*Poultry(hens, chickens, ostriches, pheasants, quails)

**Other small animals – foxes, pigeons, cageling, reptiles, small rodents, fish.

Additional sources of materials for teaching the necropsy techniques and pathological anatomy:

1. Animals included in experiments:
   a. Mice and rats – approximately 150 per year;
   b. Rabbits – approximately 50 per year.
2. Organs from slaughterhouses:
   a. Bovine, porcine - approximately 500 kg.
   b. Poultry - approximately 250 kg.
3. Samples – biopsies:
   a. 2007- 80 samples.
   b. 2008- 107 samples.
   c. 2009- 98 samples.
4. Museum of pathology - approximately 400 pieces in formalin.
   a. Infectious diseases;
   b. Parasitical diseases;
   c. Nutrition disorders;
   d. Malformations;
   e. Reaction and regeneration lesions.
5. Collections of histological diapositives– approximately 100 000.
6. Images – pathology.
   a. Photographies – approximately 5 000;
   b. Diapositives - approximately 5000.
   c. Digital photographies - approximately 10000.
7. Samples in wax - approximately 5 000.

7.1.3. Animal productions

The activity of subjects involved in animal production is organized with students in the laboratories of the faculty and in the farms with which the faculty has an intense collaboration.

a. On the site of the institution

Our faculty has one part of the zootechnic building containing some animals that are used in anatomical and clinical examination: 4 horses, 4 cows and 7 sheep.

b. On other sites

The topics of the practical works are: evaluation of productive performances of animals, evaluation of the reproductive material, forage quality, mechanical systems of milking etc. Here is the number of animals the students work with: 110 cows, 20 horses, 100 pigs, 400 sheep and 2500 poultry.

Our faculty is also involved in technical assistance for some micro-farms near Iasi.

In all these farms, the practical activities are organized for various topics, such as: studies regarding the morphological types, dynamic examination of horses, analytical and synthetic examinations of horses, preservation methods for nutrients etc.

7.1.4. Food hygiene/public health

The educational curriculum mentions all the details of this subject.

In the 4th year, the subject named "Technology, hygiene and quality of food products" is studied along two semesters – 56 hours of teaching and 56 hours of practical works.

Almost 80% of the practical activity is organized in enterprises from food industry on basis of a collaboration contract between the enterprise and the Faculty.

In the 5th year, the subject deals with the inspection and control of the food products, and in the 6th year, with special examinations for food safety.

The practical activities are organized in two separate modules:

- Examination and inspection of animal-origin products in producing and processing enterprises, following the methods of the principle "from farm to table".
- Practical works for physical-chemical, microbiological and toxic-quality evaluation of food products.

All the practical activities take place either in the specialized enterprises or within the Faculty or in the laboratory of food control.

FVM has a continuous collaboration with 3 slaughterhouses, 1 enterprise of meat processing, 2 enterprises of milk processing, 2 food storages and 2 distribution companies.

7.1.5. Consultatioms and patient flow services

7.1.5.1. Consultations

The clinical examinations take place every day of the week from 8 a.m. to 8 p.m., together with an emergency service that is available after the mentioned schedule, during the holiday of the academic staff and on Saturday and Sunday. Emergency veterinary services are available 24 hours/day, 7 days /week, 52 weeks/year. The emergency service is coordinated by the Department of Veterinary Clinics and unfolds according to a preordained schedule where the 5th year students, Ph.D. students from the clinics and an appointed professor work together.

Table 7.3.: Number of cases: a. received for consultation, b. hospitalised in the Faculty clinics, in the past 3 years

Species		Number of cases						Average	
		2009		2008		2007			
		a	b	a	b	a	b	a	b
Large / farm animals:	Bovine	91	13	82	14	114	11	38,8	7,4
	Ovine, caprine	10	6	8	3	10	1		
	Porcine	12	10	13	7	10	2		
Poultry		18	16	15	12	19	15	12,0	10,0
Rabbits		12	2	3	-	5	5		
Equine		31	16	20	14	34	32	28,3	20,6
Small/ companion animals	Canine	1515	120	1138	186	1051	116	246,5	81,7
	Feline	586	48	541	56	523	45		
	Hamster	7	-	4	-	2	-		
	Guinea pig	11	-	5	-	-	-		
	Chinchillas	5		-		-			
	Tortoises	5		2		-			
	Cageling	11		4		-			
	Pigeons	2	-	3	1	-	-		
	Ostriches	-		2		-			
	Owls	3		-		-			
	Vipers	2		-		-			
	Aigrette	-	-	1	-	-	-		

The hospital is divided and separated on various species, functioning all year round. As it has a non-stop activity, it also ensures the emergency assistance and hospitalization of patients.

7.1.6. Vehicles for animal transport

In most situations (emergencies, serious injuries and holidays, long distances) the owners bring the animals with their own vehicles.

7.1.7. Emergency service

The emergency service consists in surgery, orthopaedics, obstetrics and gynaecology, intensive care, interne medicine etc.

Emergency veterinary services are available 24 hours/day, 7 days /week, 52 weeks/year. For some difficult cases, according to the patient's illness, the head of the specific department is called in to offer medical assistance to the injured animals. They can arrive at the clinic very quickly, as they live 0.5-5 km away from the Faculty.

On call – we have in trial and emergency room service phone at 040232 407362

7.1.8. ON FARM TEACHING AND OUTSIDE PATIENT CARE.

7.1.8.1. Mobile clinic

The clinic has a programme of 40 hours/week.

When receiving emergency phone calls, the services after the programme are provided in collaboration with the veterinary surgeons from the area.

The faculty has an utility car turned into an ambulance which goes to various cases.

Species		Number of patients			Average
		2009	2008	-	
Large/farm animals	cattle	1240	32	-	784,1
	small ruminants	1609	78	-	
	pigs	1650	96	-	
Poultry		12648	334	-	4346,0
Rabbits		56	-	-	
Equine		380	72	-	226,0

7.1.8.2 OTHER ON FARM SERVICES AND OUTSIDE TEACHING

Our Faculty have contracts with farms from Iasi district. In generally students goes in the farms during the practical stages (IV-V years) like surgical, internal medicine, parazitology and animal breeding laboratory. Thus, students in a year visiting about 15 production farms.

7.1.9 OTHER INFORMATION

Our faculty is in intense collaboration of different associations concerning the wellbeing of animals: City Hall Shelter, Sf Trifon Association, Clopotelul Association and also The Student Associations – IVS (Internation Veterinary Students) and Coronis Association.

There is also a good collaboration with veterinarians of private practices.

Because of the modern equipment of our faculty, the cases arrived in a higher percentage (65%) firstley to us and there to private practices – for these reason the faculty intent to elaborate a bigger publicity program of our clinics.

In case of the hospitalised animals, the medical visit is made at least onces per day

For a better activity the faculty hold relations with Sanitary Veterinary Institutions from rural and urban areas. That for the faculty organises, in collaboration with Veterinary College and Veterinary Medicine Association, different training courses for all veterinarians from North-East region.

The clinical data of cases are registred in a primary electronic system that combines all data from triage and clinics.

7.1.10 RATIOS

Table 7.5: Animals available for clinical training (in the clinics of the Faculty or seen through the Ambulatory clinic) as ratio to the number of students in last full year of clinical training

					Denominator			
R 11:	**132/38,8**	**=**	**3,40**	**=**	**1/3,40**	**=**	**0,29**
R12:	**132/784,1**	**=**	**0,16**	**=**	**1/0,16**	**=**	**6,25**
R13:	**132/15**	**=**	**8,8**	**=**	**1/8,8**	**=**	**0,11**
R14:	**132/28,3**	**=**	**4,66**	**=**	**1/4,66**	**=**	**0,21**
R15:	**132/12**	**=**	**11**	**=**	**1/11**	**=**	**0,9**
R16:	**132/246,5**	**=**	**0,53**	**=**	**1/0,53**	**=**	**1,88**
R17:	**132/4346**	**=**	**0,03**	**=**	**1/0,03**	**=**	**33,33**

7. 1. 11. OTHER SPECIES

Some elective courses about bee and silkworms biology and pathology, fish pathology, tropical diseases, game biology and pathology, are included in the curriculum.

The training in the elective course of Fish biology and pathology is performed in the 8th semester of studies. Traditionally, the course is to the Department of Clinics. Students are taught to classify hydrobionts, are acquainted with the technologies of fish farming, the diseases on fish and the means of their diagnostics and treatment. A special attention is paid on the normative base. Places where fresh-water fish are breeded, are visited, on Bicaz lake, also for practice methods of rapid diagnostic, for 2-3 days deplacement with students, or visiting intensive cyprinid farms. There are collaboration with other universities and faculties, finalized in excellence research consortia.

7.2 COMMENTS

The didactic materials i.e. animals or of animal origin held by the Faculty of Veterinary Medicine Iasi ensures a good training of the students. Moreover, the visits to animal farms during the practical works and the specialized practice fully contribute to the didactic training. The clinics of the faculty have an adequate level of equipping, and the ordinary consultations and emergencies offer high quality training.

The faculty directly collaborates with Miroslava Paddock (belonging to the Town hall of Iasi) and takes part in a programme of sterilizing stray dogs.

The level of clinical services offered by the faculty, in comparison with the private clinics, is higher, as the faculty provides the following:

- services of radiology and echography
- specialized veterinary surgeons
- inhalation anaesthesia
- laboratory for biochemical analyses
- hospitalization
- non-stop emergency services
- mobile clinic

All these facilities can be only partially provided by the private veterinary clinics.

Generally, the casuistry of the faculty comprises all our regular clients, difficult cases sent by the veterinary surgeons from town or nearby regions (Suceava, Botosani, Vaslui, Neamt counties). The faculty collaborates with the above-mentioned practitioners. They send the ill animals to the clinics of the faculty and then, from the faculty they are sent back with the diagnosis and the therapeutic recommendations. The milch cow and horse farms have good relationships with the veterinary surgeons of the faculty. When asked, the veterinary surgeons, together with the students solve their medical problems. In the private clinics, the students have access for training stages. Their activities are discussed with the professors of the faculty for a better understanding of the cases.

The Faculty of Veterinary Medicine maintain good relationship with the Veterinary Sanitary Centre for Food Safety, Veterinary Police, Ministry of Defence, Ministry of Interior Affairs and companies and associations that deal with the animal welfare. Thus, the students are taught specific subjects such as: sanitary-veterinary regulations, animal and food import, veterinary medicine of companion animals, pathology of exotic animals etc.

The specializations of the faculty clinics are: radiology, echography, cardiology, gastroenterology, abdominal surgery, orthopaedics, dentistry, ophthalmology, andrology, gynaecology, obstetrics, parasitology, mycology, dermatology, infectious diseases, and intensive care.

The payment for the clinical services is minimal and is established by the Board of the Veterinary Surgeons of Romania, while in the private clinics the prices are higher.

The cases presented at the faculty's clinics are registered separately in each clinic and are recorded in a data base.

7.3 SUGGESTIONS

We consider that the reports presented in this chapter are satisfying.

In the future, there should be improved: infrastructure of the Veterinary Hospital, equipment with vehicles for animal transport, development of the Mobile Clinic, registration and use of a special programme for triage. The clinical services should develop diagnosis and treatment techniques for tumour diseases, immune diseases, reproduction biotechnologies of companion animals.

The emergency service will function at high standards to ensure complete veterinary assistance.

The collaboration with animal farms should thrive as the faculty does not have its own animal farm.

The transparency of the university clinics should increase, as its equipment is better than that of private clinics.

CHAPTER 8

LIBRARY AND LEARNING RESOURCES

8.1 Factual information

Library

General description of the university library, its management, location, facilities, available collections and resources.

The UASVM Library in Iasi ranks as one of the central university libraries of the city, being organized under university leadership. The Library has a scientific and encyclopaedic profile.

The main objective of the UASVM Library in Iasi is to support the process of modern education and research carried out primarily by members of the academic field: students, teaching staff, researchers, etc. as well as any other external users.

Within the larger context of state education reform, the mission of the library has always depended, and it still does, on the development and modernization of specific services, such as the introduction of new computer technologies, achieve compatibility and cooperation at a local, national and international level. Its ultimate aim is to meet the users'requirements. Based on these principles, the modernizing and developing programme of the library (2007-2009) has been listed as a top priority in the University's Strategic Development Plan.

The library offers unlimited access to all its collections enabling, at the same time, indirect access by means of its departments, to resources made available by other libraries. By doing so, the Library offers precious teaching and learning resources covering a wide range of subjects for all of the university's faculties and specializations.

Management of the Library (e.g. Library Scientific Council)

The Library functions according to specific Regulations approved by the Senate of the university and supervised by the Library's Chief of Department. The Chief of the Library Department is appointed with the approval of the university's Rector.

A Chief of Department manages the Library according to standard personnel diagram for university libraries. According to the law, the UASVM Library receives a budgetary fund of 8% from the university's annual budget.

The Chief of Department is assisted in the acquisition process by a Library Scientific Council in which all the specializations and faculties are represented by an appointed professor. At the proposal of the Scientific Council, the Senate decides on the annual funds intended for the extension and renewal of the Library's collections. All the other funds allotted for the Library's activities are previously approved by the Senate.

Within the limits of the funds granted by the University, the library performs the following activities: acquisition of new books, subscription to internal and external titles (books and serials), internal and external exchange of publications published by the university teaching/researching staff and research institutions.

The main sections of the Library are:

1. Management and Marketing Department.
2. Statistics and Records Department.
3. Management of Book Collections Department.
4. Internal & External Exchange and Loan Department
5. Periodicals Department (print + online).
6. Cataloguing Department.
7. Classification and Indexing Department.
8. Editorial Department.
9. Interlibrary Loan Department.

The Library carries out all its specific activities and services with the help of the specialized library software Liberty3, among which we mention: Acquisition, Cataloguing, Classification, Circulation (loan and reservations services), statistic reports and the management of serials, interlibrary loan, e-mail alerts.

The central library comprises all the subsidiary department libraries established at each discipline within the university's faculties. There are 45 such department libraries located at the specialized subjects of each faculty and 6 more hosted by various departments of the university administration.

The timetable of the library is set by the chief of department (as a consequence of the requirements of the academic schedule - examination period, holidays, the number of staff etc.) and approved by the Senate.

The library offers the following services to all of its users (free of charge):

1. Non-stop access to the OPAC (Online Personal Access Catalogue)
2. Online reservation service & e-mail alerts.
3. Online access to a personal user account on the Liberty3 soft.
4. Home loan of documents.
5. International and internal interlibrary loan.
6. Access to all the reading rooms (ground floor, 1st floor, 2nd floor)
7. Free shelf access to the reading room collections.
8. Free access to the internet and the electronic resources of the library.
9. Assistance in identifying the publications/ resources in the traditional catalogues as well as in the online database.
10. Specialized bibliographic assistance.
11. Training readers in using the resources of the Library.

Charged Services:

1. Copies from the library's collections.
2. Printing of copyright free electronic documents.
3. Translations.
4. Lamination & binding.

The Central Library

The Library supports educational, scientific and research processes at the University of Agricultural Sciences and Veterinary Medicine, offering plenty of resources for all its faculties.

Recently extended and modernized, the library functions in a newly refurbished space spanning on four levels with a space covering 1.350 square meters. It comprises 3 reading rooms with 140 seats available for users and a Multimedia & Internet Room with 36 Pcs.

To ensure comfortable reading conditions the new extended library provides 176 seats for readers, including 40 ones equipped with computers.

The library's semi-basement level hosts the Registration and Loan Office. Both the main book stock and the periodicals stock are located here.

The ground floor is home to the largest reading room of the library, comprising 76 seats in the area displaying some of the Romanian specialized collections and 24 seats available for study in the Rotonda. This section of the library hosts significant collections of specialized dictionaries, encyclopaedias and other specialized publications, all published in foreign languages. The users can find here publications mostly in French, English, Italian or German. The qualified staff at the front-desk makes sure that every assistance is provided to the user, helping him/ her find the right resources.

The first floor hosts collections of Romanian and foreign periodicals, providing 30 seats for the users, 4 of which are also equipped with computers, thus enabling quick access to the library's database and any other significant electronic resources.

The Multimedia & Internet Room, situated on the 2nd floor, provides 46 seats, with 36 computers and 10 seats for individual study. The users can access here the library's database and all its online and electronic resources.

In the new reading rooms available for the library's users, the collections with open shelf access are arranged according to the Universal Decimal Classification System. Apart from its traditional resources, the Library offers increasing amounts of information on CD-ROMs and access through the Internet to full text databases, primarily electronic journals. Consequently, the Library has become an important centre for the dissemination of scientific information.

Another important section of the book stock owned by the UASVM Library is represented by the special collections. Some pieces from the patrimony book stock hosted by the library's archives (comprising publications in French, German, Russian) are on public display, in secure window cabinets from the main reading room located on the ground floor. Among the oldest publications we mention here specialized books, dictionaries and encyclopaedias printed abroad starting with the 18^{th} century.

Acquisition budget for the last four years:

Year	Local currency
2006	110.000 Ron
2007	210.000 Ron
2008	380.000 Ron
2009	185.000 Ron

Staff

Library Staff

Number of full-time employees

There are eleven full-time employees working at the central library, nine of which are qualified librarians holding a postgraduate degree in information & documentation science. At the end of 2009 there were:

- 6 positions for librarians with higher education studies, 1st degree rank.
- 1 position for a librarian with secondary education, 1st degree rank.
- 1 position for a librarian with higher education studies, 2nd degree rank.
- 1 position for a librarian with higher education studies, 3rd degree rank.
- 2 positions in maintenance staff
- 7 vacancies

Year	Total no. of positions
2007	11
2008	10
2009	9

The employees working at the central library have always been involved in various professional activities meant to develop and extend their qualifications so as to provide better services for its users. In the past few years, however, an intensified programme including multiple activities offered them the opportunity to get involved. Among these, we mention here attendance to national and international conferences and professional workshops.

The administrators of the subsidiary department libraries (51) are listed as associated collaborators of the central library.

– **External Staff**

The technical support staff and the IT support staff in charge of the software maintenance and various network dysfunctions count as external staff (12 persons).

Number of journals/ periodicals and books received yearly:

Year	Periodicals (Romanian /foreign)	Books (Romanian /foreign)	Donations (books+ periodicals)	Total
2006	295 volumes	631	347	1273
2007	334 volumes	1438	932	2704
2008	300 volumes	1142	689	2131
2009	250 volumes	658	451	1359

There are 1257 titles of vet books and 5087 periodicals, 61 reviews, and 1238 volumes.

Number of seats for students in the reading rooms: 176

Library timetable:

	Working days	Weekend
Monday-Friday		
Academic year	**8-16**	**-**
Examination period	**8-18**	**8-14**
Holidays	**8-14**	**-**

Number of volumes lent by library users per academic year:

Year	Number
2006	35.016
2007	280.977
2008*	24.389
2009*	8.108

*the library was closed for about a quarter of the academic year due to construction and consolidation. As a result the book stock was transferred and the access to these resources reduced.

*the library was closed more than half of the academic year due to construction and consolidation. As a result the book stock was transferred, and the access to these resources reduced.

Department Subsidiary Libraries

The collections of the specialist subsidiary libraries are hosted in special rooms organized by each faculty. Their book stock is recorded in the central library's stocks and the publications available are used by both the teaching staff and the students involved in various research/diploma projects and workgroups. Each year, the central library performs a general inventory, thus verifying the records from the subsidiary libraries. Their timetable is the following: Mon.-Fri. 8.00-18.00.

Editorial activity

The Library's Editorial Department In 2009, the Library's editorial activity consisted of :

- 112 reports
- 29 statistical reports
- 1 annual bibliography regarding the publications that entered the UASVM Library Iasi .
- 4 papers presented at international seminaries.
- 1 article published in the ISI-quoted journal *Airbiology*.
- Journal of Applied Research in Library Sciences, ISSN 1844-2234, a project initiated and managed by the UASVM Library Iasi.
- marketing products : flyers, posters, information sheets, etc.

IT resources and services

The IT-supported services provided by the library offer users wide access to the internet, free access or/and subscribed online databases, online versions of periodicals, reports, video files, CDs, DVDs and digitized publications/documents. They can access the above mentioned resources in the Multimedia & Internet Room opened on the 2nd floor (with 36 seats equipped with PCs available for users). The users in possession of a library membership card can use the facilities at disposal in the Multimedia Room, i.e.: to consult, copy, download and print all the necessary information.

The updated sound and wireless systems ensure a modern environment for study as well as for entertainment related activities.

International cooperation

International cooperation in the exchange of scientific publications

The UASVM Library cooperates with university libraries and research stations from all over the world, having as main objective the exchange of various scientific publications, either in print or electronic format. As a result there are several partnership agreements between the UASVM Library and their partners of exchange (29 international partners). Within such partnership relations, the library sends out constantly the most recent publications edited by members of the university and teaching/research staff.

International cooperation in professional training

The UASVM Library Iasi is a founder member of the Balkan Libraries Union (BLU). The general aim of BLU is to assist libraries in the Balkan area in forming a functional network able to ensure the preservation of the Balkan cultural heritage, to improve access to collections in Balkan libraries and to provide more efficient library information services in the Balkans.

The cooperation consists of regular meetings, seminars, working groups, publications aiming at improving professional skills and supporting special projects and development schemes. In order to promote a close contact and cooperation among its members the union also supports exchange visits between partner libraries and universities.

As a member of this organization the library has already taken part in international conferences, engaging itself in the development of future projects concerning various fields of documentation and library science. The UASVM Library chief of Department has already been elected vice-president in the executive committee of the union. In 2010 the UASVM Library plans to host one of the regular meetings of the board.

8.2. Commentaries

Temporary difficulties encountered during this time of crisis:

- lack of personnel
- lack of an employee in charge of system-related problems.
- accidental dysfunction of the internet and electric networks.
- lack of professional equipment for the maintenance of intensely visited areas.
- some delays in the payment of invoices for publications purchased from contract funds

8.3. Sugesstions

As for 2010, the Library aims at extending the encyclopaedic profile of the collections, expand its range of scientific activities and to reaffirm its cultural dimension by setting up a special programme addressing the community, such as: speeches and conferences, meetings with local personalities, book launches, exhibitions, cultural meetings. By doing so the library will provide for its main target users and not only, multiple opportunities to get involved in cultural and scientific activities.

The library also aims at developing a special programme of user training in information retrieval and library services orientation. The programme's objective is to train an independent library user.

Determined to persevere in its efforts to meet the requirements of constant change in the field of information retrieval and dissemination as well as the needs of its users, the UASVM Library remains faithful to its main objective of supporting both top quality education and research.

CHAPTER 9

STUDENT ADMISSION AND ENROLMENT

9.1. UNDERGRADUATE COURSES

In Romania, education is public and is organized according to the conditions of The Law of education, in Romanian, as well as in the languages of national minorities and widely used languages.
The entrance in the higher education either the public, private or confessional, for each cycle and programme of university studies, is decided by each institution of higher education and organized on specific methodologies of entrance which have to obey the laws.
Before each session of admission in the higher education, UASVM Iasi, FVM respectively, presents the educational offer by a promotional campaign thoroughly elaborated and advocated by the academic staff and through mass media.
Till 2010, at the FVM Iasi, there were the following forms of higher education:
***- bachelor studies** (with attendance);*
*- **master studies** (with attendance);*
*- **doctorate studies** (with and without attendance).*

METHODOLOGY OF ENTRANCE
Legislation
The entrance is organized according to the stipulations of the **Law of Education 84/1995** republished, **Law 128/1997 regarding the Statute of the Teaching staff**, **Law 441/2001 regarding the university and post-university state education with fee**, **Decision of Government 1011/2001** regarding the organization and functioning of the distance learning and with low attendance, **Law 288/2004**, **Decision of Government 635/11.06.2008** regarding the structure of institutions of higher education and programmes of Bachelor university studies, provisory accredited and authorized, **Decision of Government 404/2006** regarding the organization of master studies, **Decision of Government 567/2005** and Ordinance 4491/2005 regarding the organization of doctorate studies, **Ordinance of the Ministry of Education no. 3235 of February 10th 2005** regarding the organization of Licence studies and **Ordinance of the Ministry of Education no. 3331/04.03.2009** regarding the general criteria of organizing and functioning the admission for 2009/2010. The University Senate of UASVM Iasi yearly approves **the Admission Regulations to USAMV Iași.**

The candidates for admission to the university are high school graduates with baccalaureate diploma (or its equivalent), citizens of Romania and of the European Union, graduates from institutions within the European Area of Higher education or from the Federation of Swiss States.

A candidate can go in for more domains of the same institution or different institutions, but can be admitted only to one specialization subsidized by the state budget.

The candidate who was accepted to more universities / domains can choose the one that is subsidized by the state, only by submitting the dossier with the original documents in 6 days after the date the results of the contest were posted.

The graduates with diploma of the short-term university (college), can continue their studies in the higher education, licence type, within the initial or related profile studies, in the limit of the places decided by the Senate of the University. The accepted candidates will take exams at some new subjects and will be matriculated in the 3rd year.

Necessary documents for admission

For the registration at the entrance contest, the candidates must hand in a dossier with the following documents:

- *a standard application form;*
- *baccalaureate diploma or an equivalent document (original);*
- *birth certificate, certified;*
- *copy of identity document;*
- *medical certificate;*
- *four photos;*
- the candidates that are already students of another faculty need: *a certificate which attests the quality of student, a certified copy of the baccalaureate diploma or an equivalent document* as well as the *registration certificate .*
- *the Licence diploma* or an equivalent one, as well as *the graduation diploma* for those who ant to attend a second specialization;
- *receipt of the admission fee;*
- the candidates who wish to attend a second domain (students/ graduates), will present a certificate issued by the faculty of the first domain/ specialization, which shows *the number of state-paid years that were attended*;
- conclusive documents which can help for a free fee admission (for orphans, descendants of the deceased or wounded in the Revolution from December 1989, children of the academic or support staff from our university and teachers from pre-university education – in activity, retired or deceased).

Tabel 9.1.

Admission to Bachelor studies for 2009-2010 academic year

NUMBER OF BUDGETED PLACES	96
NUMBER PLACES WITH FEE	100
TOTAL CANDIDATES	272
CANDIDATES/ BUDGETED PLACE (COMPETITION)	2.86
MATRICULATED – BUDGET PAID	96
MATRICULATED – WITH FEE	80
LAST AVERAGE GRADE – BUDGET PAID	8.67
LAST AVERAGE GRADE – WITH FEE	6.31
MALE MATRICULATED	77
FEMALE MATRICULATED	99
STUDENTS FROM MOLDOVA (8 COUNTIES)	167
STUDENTS FROM OTHER REGIONS	9
STUDENTS FROM OTHER STATES	13

Table 9.1.1.

Admission to Master studies for 2009-2010 academic year

NUMBER OF BUDGETED PLACES	100
NUMBER PLACES WITH FEE	40
TOTAL CANDIDATES	138
MATRICULATED – BUDGET PAID	100
MATRICULATED – WITH FEE	34
MATRICULATED – SPECIALIZATION LABORATORY DIAGNOSIS	25
MATRICULATED SPECIALIZATION SANITARY VETERINARY EPIDEMIOLOGY AND LEGISLATION	27
MATRICULATED SPECIALIZATION VETERINARY CLINICS AND THERAPY	29
MATRICULATED SPECIALIZATION INSPECTION AND CONTROL OF PRODUCTS OF ANIMAL ORIGIN	53

Table 9.1.2.

Admission to licence studies for 2010-2011 academic year

NUMBER OF BUDGETED PLACES	93
NUMBER PLACES WITH FEE	30
TOTAL CANDIDATES	285
CANDIDATES/ BUDGETED PLACE (COMPETITION)	3.06
MATRICULATED – BUDGET PAID	93
MATRICULATED – WITH FEE	30
LAST AVERAGE GRADE – BUDGET PAID	8.67
LAST AVERAGE GRADE – WITH FEE	8.20
MALE MATRICULATED	30
FEMALE MATRICULATED	93
STUDENTS FROM MOLDOVA (8 COUNTIES)	119
STUDENTS FROM OTHER REGIONS	4
STUDENTS FROM OTHER STATES	4

Table 9.1.3

Admission to Master studies for 2010-2011 academic year

NUMBER OF BUDGETED PLACES	70
NUMBER PLACES WITH FEE	40
TOTAL CANDIDATES	81
MATRICULATED – BUDGET PAID	70
MATRICULATED – WITH FEE	6
MATRICULATED – SPECIALIZATION LABORATORY DIAGNOSIS	20
MATRICULATED SPECIALIZATION SANITARY VETERINARY EPIDEMIOLOGY AND LEGISLATION	20
MATRICULATED SPECIALIZATION VETERINARY CLINICS AND THERAPY	21
MATRICULATED SPECIALIZATION INSPECTION AND CONTROL OF PRODUCTS OF ANIMAL ORIGIN	15

9.1.2. STUDENTS' ADMISSION

The admission of candidates is performed on the basis of exam, being determined by the number proposed by the Senate of the University and decided by the Government under the conditions established by the Law of Education and other normative acts.

The prospective students are admitted to the faculty without written examination, the criteria of distribution of positions being determined by the grades obtained during the high-school: *75% general average grade of high school and 25% the baccalaureate average grade* or (3 x the graduation average grade of high school + baccalaureate average grade / 4).

As for the admission to the master studies, the criteria are *the general average grade of the years of study during the faculty 75% and the licence written and oral examination – 25%.*

The admission of candidates is strictly performed in the descending order of the general average grade.

Enrolment

Admission (enrolment) to the higher education is performed strictly in the *descending order of the general average grade* of the candidates according to the ranking system and within the limit of the number of places available.

If there are more candidates with equal average marks, the ranking is done by taking into consideration the following criteria:

a) general average grade of high school;

b) average grade of the baccalaureate examination;

c) average grade of the last year of high school.

The minimum average grade for admission is *5 (five).*

The state-budgeted places and those with fee proposed by the University, are approved by the Ministry; the University Senate, according to the university autonomy decide the number from each faculty.
The candidate admitted to more universities or domains has the possibility to choose the one that is state-budgeted, by *handing in the dossier with the original documents within 6 days* from the date the results of the exam were posted.
The candidates that are declared admitted will sign the *contract of studies* and will pay a fee of enrolment within 6 days from the date the results of the exam are posted.
Disputes
The higher education institutions that organise the admission are the only in condition to solve the disputes which are presented in 48 hours from the exact time of posting the results and are to be solved in 48 hours from the deadline of presenting the disputes.
The results of the disputes are solved and posted by the Commission of Admission. The decisions of the commission are indefeasible.
Because of the university autonomy, the Ministry of Education, Research, Youth and Sport can interfere in solving the disputes only when the general criteria of organization and development of the admission or law regulations are infringed.

Table 9.2. Intake of vet students in the past five years

Year	number applying for admission	number admitted	
		'standard' intake	Foreigner students +olympics
N* 2009	272	176	12+1
N - 1 2008	245	147	7+2
N - 2 2007	226	136	2+1
N - 3 2006	255	169	1+1
N - 4 2005	335	177	3+1
Average	266.6	161	5+1.2

*year prior to evaluation

Table 9.3: Student flow and total number of undergraduate veterinary students

Number of students present after admitted year 1			Number of additionally admitted students
1	1st year1) 2004-2005	193	From which 3 foreign stud.
2	2nd year 2005-2006	150	~ 3 ~
2	3rd year 2006-2007	155	~ 3 + 21 from the College of veterinarians
3	4th year 2007-2008	150	
4	5th year 2008-2008	147	
5	6th year 2009-2010	144	
6	>6th year number undergraduate veterinary students	10 134	

1)mark year matching MNY 6

The number of **annually expelled students** was from 2005-2009 respectively: 43+17+3+2+2+1

Table 9.4: Number of students graduating /expelled annually over the past five years:

1	Year	Number graduating
2	N* 2009	132
3	N – 1 2008	117
4	N – 2 2007	136
5	N – 3 2006	108
6	N – 4 2005	90
7	average	116.5

*year prior to visitation

9.2 COMMENTS

At the last four sessions of admission, the competition on the budgeted places has evolved: 2.6 candidates/ place in 2007, 2.6 candidates/ place in 2008, 2.8 candidates/ place in 2009, 3.1 candidates/ place in 2010. The significant increase of competition on the budgeted places at the last two sessions is consequent to a promotion campaign for admission, that took place on a rigorous programme and with the participation of all staff of UASVM Iasi.

The main peculiarities of the 2009 and 2010 admission are :

- The students matriculated in the 1st year exclusively come from Moldova, i.e. 8 counties: Suceava, Botosani, Bacau, Iasi, Neamt, Vaslui, Vrancea and Galati.
- FVM Iasi covers the requirements of labour force in veterinary medicine of eastern Romania, thanks to the number of enrolled students, equipment and education quality.
- The system of admission is designed to ensure the correctness of the selection; from the technical point of view the system is rudimentary and does not test the elementary skills of the candidates for veterinary medicine.
- Most of the students enrolled in 2009 and 2010 are female due to the predominance of females in the generations of the candidates.

Starting with 2011/2012, master specializations will be included in the programme of licence studies.

9.3 SUGGESTIONS

The increase of the admission efficiency has only one objective, which can be achieved at the 2011 admission: organization of an admission examination on various criteria which will include two exams of biological culture. Thus, the candidates, future 1st year students will be partially initiated in the general themes of veterinary medicine.

We will insist upon the candidates' information regarding both the social importance and the vicissitudes of the profession and the studies: technical education with many applicative activities, studies of 6 years, nervous and physical solicitation.

The admission will be organized and supervised by the academic staff with the highest professional training and moral probity.

CHAPTER 10

ACADEMIC AND SUPPORT STAFF

10.1. Factual information

The Faculty of Veterinary Medicine within UASVM Iasi was accredited for the Veterinary Medicine domain – full-time, 6 years, specialization Veterinary Medicine. In 2000 and 2005, the Faculty of Veterinary Medicine was reaccredited according to the law by the National Council of Evaluation and Accreditation of Higher Education Institutions.

In 2007, the Faculty was evaluated by The Romanian Agency for Quality Assurance in Higher Education, the institutional structures receiving "high degree of trust". In 2009 there were correlated the courses of study between the faculties from the other university centres, the curricula being modified according to the requirements of the Bologna process as follows:

-licence studies: 6 years, -master studies 1,5 years , - full time PhD studies – 4 years.

The teaching process has been perfected, especially on the application part, by improving the clinical education and modernizing the clinics, equipping several premises of the Veterinary Hospital, organizing the practice according to the curricula more efficiently. We used for training the sanitary-veterinary network, diagnostic laboratories, private clinics, and animal farms.

The representatives of the academic staff, employed full time, ensure the covering of all the domains from the curricula, generally using research-based teaching. The associate professors are alternatives for teaching subjects included in the specializations of Cycle 2 – Master studies. The teaching is done at groups of at most 18 students, according to the decision of the Senate. All the academics are veterinary surgeons for the clinical veterinary subjects and those which provide paraclinical services to the public.

Part-time employees are veterinary surgeons of the State Sanitary-Veterinary Laboratories from different counties which ensure a practical integration of laboratory diagnostic.

Of the activities carried out by the academics after the programme, we can mention visits to farms for diagnosing and treating certain disease at farm animals. These visits take places either during or at the end of the academic year.

The personnel structures have been annually modified according to the budget of the university and the possibility of financing on the one hand the teaching staff employed full-time and, on the other hand, part of the support staff financed either by the faculty or university. The personnel structure is presented in the tables below:

Table 10.1 : Personnel structure

	Budgeted posts (FTE)		Non-budgeted posts (FTE)	Total (FTE)
1. Academic staff	Veterinary surgeons	Non-veterinary surgeons		
Teaching staff	37	4	-	**41**
Research staff	-		-	**-**
Consultant professors	11			**5,5**
Associate professors	7		-	**7**
Total teaching staff	**55**	**4**		**53,5**
Total teaching staff(VS+NVS)	**59** Including assoc. prof.			**53,5**
2. Support staff				
Responsible for care and treatment of animals	1+3*=4		**-**	
Responsible for the preparation of practical and clinical teaching	18		**-**	
Responsible for administration, general services, maintenance etc.	1+8*=9		**-**	
Engaged in research work	**-**		**-**	
Others				
Total support staff	**20+11*=31**		**-**	**20**
Total staff	**68+11*=79**			**73,5**

* Referring to the support staff, 11 of the 31 employees serve the faculty but are paid from the university funds.

Table 10.2. Allocation of the staff on clinics

Clinic name	Teaching staff				Others	Support staff		
	Professors	Lecturers and readers	Associate professors	Assistant professors	Consultant professors	Technical	Carers	Administration
VIII-Preclinics	2	8		2	4	6	3*	-
IX-Clinics	4	9	7	1	4	7	5*	1
X- Animal foodstuff and public health	4	6		4	3	5	3*+1	
Total	**10**	**23**	**7**	**7**	**11**	**18**	**11*+1**	**1**

*Referring to the support staff, 11 of the 31 employees serve the faculty but are paid from the university funds.

Table 10.3. Ratio staff /student for 2009-2010 academic year

					Normal ratio values
R1	No. total academic FTE /no. students	**53,5/854**	**1/15,96**	**Denominator 15,96**	**8,85-10,42**
R3	No. total FTE veterinary surgeons – teaching staff/ no. students	**49,5/854**	**1/17,25**	**Denominator 17,25**	**10,62-12,62**
R4	No. total veterinary surgeons – teaching staff / no. students which graduate annually	**49,5/132**	**1/2,66**	**Denominator 2,66**	**4,91-7,21**
R5	No. total academic FTE /no. total FTE support staff	**53,5/20**	**1/0,37**	**Denominator 0,37**	**0,53-2,20**

As we can see, the value of the ratio must be improved in the following years by completing the personnel structure if the ministry of education accepts the occupation if the vacancies.

a) Selecting and employing the teaching and support staff

"Ion Ionescu de la Brad" University of Agricultural Sciences and Veterinary Medicine employs the teaching and support staff by contest, respecting the requirements of the Law of education modified and republished no. 84/1995, the Law of the Teaching Staff Statute no. 128/1997, the university chart approved in 2007 and the decisions of the University Senate. The contest is public.

The employment of the teaching staff is made according to the necessities of the faculty, the available financial resources and the candidates' competence. The contest is organized by the contest commission appointed by the Rector and is made up by members of the academic staff of the faculty and/or of other accredited universities.

In order to occupy a teaching post, the candidates must have the specialization, attested by a study/licence diploma, in accordance with the structure of the subjects listed in the post he/she candidates for and also hold a graduate certificate awarded by the Department for the Training of the Teaching Staff or attend its courses, as it is compulsory to finish them in the first 3 years of activity.

The teaching posts can be occupied by Romanian or EU citizens (speaking Romanian language).

In order to get the post of **assistant professor** some general conditions are required: maximum age of 35 years, at least 2 scientific papers (articles, studies) published in well-known specialized journals.

The contest for the occupation of a post of preparatory/ assistant professor consists of: written, oral and practical examinations, specific to the post. The practical examination consists of a seminar and a lesson of practical works in front of the students, in front of the contest commission or only in front of the commission if there is no teaching activity when the contest takes place.

The contest commission for the posts of preparatory/ assistant professor is made of the head of the department or one of his representatives as president and 2 members, specialists in the field of the post or related domains, being at least a lecturer.

In order to occupy a post of **lecturer**, the candidates must meet the general requirements, must have a PhD in the domain corresponding to the post or must be PhD students in the final stage, have at least 5 scientific papers (articles, studies) in the specialization of the post (from which 2 as main author/coordinator) in well-known specialized reviews.

The contest for the occupation of a post of **lecturer** consist of the analysis of the personal dossier as well as the delivering of a public lecture in front of the students, in the presence of the contest commission which is made of the head of the department or one of his representatives as the president and 3 members, specialists in the field of the post or related domains, being at least a PhD lecturer. The contest commission must necessarily include at least one reader or a professor.

For the occupation of a post of a **reader/professor**, the candidates must meet the general requirements, have a PhD in the domain corresponding to the post or related to it. The didactic and scientific activity should correspond to the criteria established by the National Council of Attesting University Titles, Diplomas and Certificates (NCAUTDC) and to the specificity of the post. The candidate must have a minimal list of publications required by NCAUTDC from which at least one scientific paper as first author in ISI reviews, be a coordinator (director) of at least one research project and have at least a book published in the field of the post, as only one or first author with a contribution of over 50%.

To occupy a post of university professor, the candidate must have published a minimal list of publications required by NCAUTDC from which at least 2 scientific papers as the only or first author in ISI reviews, have coordinated at least one research project won by internal competition and another by external competition (coordinator or team member) and have published at least 2 books in the field of the post as the only or first author with a contribution of over 50%.

The contest for the occupation of the posts of **reader and university professor** consists of the analysis of the dossier submitted by the candidates. Those who do not come from the higher education it is compulsory to deliver a public lecture in front of the students and the contest commission.

The contest commission is made of the dean of the faculty or one of his representatives, member of the Senate as president and four members of which at least two should not belong to UASVM Iasi, but from accredited universities. The contest commission is made of readers, professors, for a post of reader, respectively only university professors for a post of professor and is approved by the Senate. The result of the contest is approved by the Council of the Faculty with at least 2/3 of the total number of the present academic staff through nominal open vote. An excerpt of the minutes of the meeting of the Council and a list of the present members are attached to the contest dossier. The contest dossiers for reader and professor, validated by the Senate and the other documents are submitted to NCAUTDC.

The professors with very good results can candidate for becoming **PhD Supervisor.** In order to acquire the quality of PhD Supervisor, the interested professors must elaborate a dossier according to the general criteria established by the Ministry of Education, Research and Youth and by the Senate of the University. The PhD Supervisor is appointed by an Order of the Ministry of Education and Research at the proposal of the University Senate with the nominal approval of the National Council of Attesting University Titles, Diplomas and Certificates awarded on the basis of the evaluation of the didactic and scientific research activity of national and international importance. A PhD Supervisor can guide simultaneously 15 PhD students at most. The coordinating activity of the PhD students is included in the didactic and research workload of the scientific supervisor, according to the legislation.

The university professors who retired can still work in higher education as **consultant university professors** at the recommendation of the department, with the agreement of the Council of the Faculty and of the Senate Board and the approval of the Senate of UASVM Iasi, all of them being obtained by open nominal vote in conformity with the legislation. The title of consultant professor can be awarded only to the university professors who usually are PhD supervisors attested by NCAUTDC and guide the PhD students, carry out an outstanding scientific activity which results in scientific papers published in publishing houses/ specialized review when they retired. The quality of consultant professor is analysed annually.

The quality of **visitor professor** is conferred to some first rank personalities of the national and international science and culture, who come to the university in order to carry out certain activities at international standards. The quality of visitor professor is conferred by the decision of the Rector, after the nominal approval of the University Senate on the basis of well-founded proposals of the Councils of the Faculties. The persons appointed as visitor professors can be employed with a work contract for a determined period of time or by the decision of the Rector in which case he is paid for the number of hours lectured, according to the optional and financial possibilities of the faculty, meeting the requirements of the law.

The vacant teaching post can be occupied temporarily with annual reconfirmation by the titular teaching staff of UASVM Iasi or by associate teaching staff, outside the university in which case they are paid for the number of hours lectured, meeting the requirements of the law.

The **associate teaching staff** can occupy the following posts: preparatory teacher, assistant professor, lecturer, reader and professor. The occupation of the vacant post with associate teaching staff outside the UASVM Iasi is made by contest, organized at the department with the approval of the Senate, at the justified proposal of the Faculty Council. The contest for occupying the vacant posts with associate teaching staff consists of the analysis of the contest dossier and an interview in front of a commission made of the Dean, as president, the chief of department and minimum one titular academic of UASVM Iasi having the title at least similar to the contest post in the specialty of the post or a related one. After the contest takes place, a minutes is drawn up which will be added to the candidate's dossier and will be submitted to the Vice-Rector responsible for the didactic activity in order to be analysed and approved by the Senate.

The candidates must meet the minimum requirements stipulated by the Law 128/1997 for the occupation of the didactic posts they candidate for. The employment of the associate teaching staff is made for a semester or an academic year through the Rector's decision and the payment is made in accordance with the occupied post for the hours lectured.

The support staff is employed by contest. The Rector appoints the examining commission, teaching staff belonging to the department where the support staff will work.

b) Distribution of staff on departments

The Council of the Faculty establishes the structure of the teaching staff on departments. This depends on the degree of convergence of the disciplines and the degree of representation in the curriculum. Each department must have at least 12 occupied teaching positions.

c) Recruiting and maintaining the staff

The recruiting strategy of the staff consists of selecting the best graduates to occupy by contest the posts of preparatory teachers and assistant professors, recruiting the best students who will be send for training stages abroad in order to occupy by contest the posts of preparatory teachers and assistant professors, recruiting the best

PhD students, especially the full time ones, and attracting associate teaching staff from the specialists with good results in the production and research activity.

In 2008 UASVM Iasi won the project "Supporting and improving the participation of PhD students in doctoral programmes" and in 2009 the project "The PhD students participation in the doctoral programmes", financed by the European Social Fund through the Operational Sectorial Programme of the Development of the Human Resources 2007-2013 for supporting the doctoral studies. These projects offer the possibility of finishing the doctoral studies in 3 years with a monthly scholarship of 1850 lei and the possibility of going abroad for a stage of 3 to 8 months. Thus, the selection of the teaching staff is much more efficient.

The most important problem is the payment level for the position of assistant professor which is quite low in comparison with the one in the private veterinary clinics and pharmacies or the distribution firms of veterinary products. At the moment, the Ministry of Education, Research and Youth does not finance yet the intern and resident stages for the clinical education.

d) Staff changes and occupancy in the last decade

The didactic workloads are occupied in proportion of 95 % by the teaching staff employed in UASVM Iasi, staff who does not have workloads in other universities. The titular teaching staff have the experience and competence adequate to the exigencies specific to higher education.

The movement percentage of the teaching staff towards other domains and vice versa is unnoticeable.

Several PhD students with very good results and competence for the didactic domain finished their doctorate theses in the previous years and can compete for the vacant posts, but starting with 2009 all the vacancies were blocked because of the financial economic difficulties Romania is passing through. In 2010 there are 24 vacant didactic posts, the occupation degree being of 63%. Both in 2009 and in 2010, we requested the unblocking of the vacant posts, but the Ministry of Education, Research and Youth did not approve them.

e) Employment of supplementary staff on the income from clinical services

The faculty does not employ supplementary staff on the income from clinical services.

f) The possibility of the teaching staff to work in private clinics in their free time

There is a close connection and good collaboration between the faculty and the private clinics and so the students can perform the practice stages or can work as voluntaries in these clinics. Thus, they can be competently guided by the teaching staff or by the practitioners.

The main objective is to encourage the young specialists to gain practical experience and thus to be able to improve the financial situation, but mainly to offer the possibility of practical training in the field of companion animals.

g1) The participation of the teaching staff in home and international manifestations

Several professors of the Faculty of Veterinary Medicine Iasi take part in home and international events. All the expenses are generally supported from research projects.

g2) Participation in study stages

In the last 5 years, 24 professors benefited by training stages abroad through international programmes (Tempus, Socrates-Erasmus, Leonardo da Vinci) or attended international courses. Some Socrates programmes are being carried out at the moment.

Comments

The teaching staff necessary for the didactic and research process is a management issue of the Faculty.

The administrative management of the faculty is extremely useful, but limited as responsibilities.

The strategic decisional process is supported by a strategic management group – The Leading Board of the Faculty Council.

The insufficient budget influences the number of the personnel and the quality of the didactic process. At the moment, the ratio between the young and the older teaching staff is 35%- 65%.

The ratio between the number of active teachers and students of the Licence cycle who, at present is not corresponding, should increase, but this depends on the unblocking of the posts and the positive evolution of the budget.

The monitoring of the didactic activity is done within the department and by the leaders of the faculty. The evaluation chart of the teaching staff, approved by the University Senate has as main criteria of evaluation the results in research, didactic and administrative activities. In order to improve the quality of the didactic activity the evaluation chart also includes the evaluation of the teaching staff by the students.

The payment level of the teaching staff is differentiated.

Generally, the level of payment for the posts of preparatory teachers and assistant professors does not satisfy the expectations and is not in accordance with the level of professional results as it is very low in comparison with the payment level in the private sector. Solving the problems of employing and maintaining the teaching staff is closely connected to the budgetary and extra-budgetary funds.

As to the structure of the academic staff on professions, the majority is represented by the veterinary surgeons (93%) and a very low percent (7%) is represented by specialists from related domains (1 chemist, 1 biochemist, 1 pharmacist, 1 zootechnical engineer).

As regards the support staff, owing to the diversification of the extra-budgetary financial resources and of the problems connected to equipping, supplying and managing the assets, the post of Chief Administrator was introduced in the organigram of the Faculty of Veterinary Medicine Iasi.

The improvement of the conditions of carrying out the didactic process is a permanent preoccupation of the leaders of the Faculty. The budgetary and extra-budgetary financial resources are used primarily for equipping the amphitheatres, laboratories and the library with modern apparatus, computes and latest specialized publications. Electronic courses can be accessed on the web page of the faculty. An intranet network is intended to be set up.

Suggestions

1. Improving the clinical services in order to attract supplementary funds to the budget.
2. Getting financing from the Ministry of Education, Research and Youth for ensuring the internal and resident stages in the clinics.
3. Increasing the financing level per student provided by the Ministry and improving the ratio between the teaching staff and the students.

CHAPTER 11

CONTINUOUS EDUCATION

11.1. FACTUAL INFORMATIONS

The importance of continuous professional training

The main objective of the profession of veterinary surgeon is to ensure the animal and public health and animal welfare at an international level.

The European Commission Directive 78/1026/EEC presents the acknowledgement principles of education, examination and other evaluation measures of veterinary surgeon competence in order to provide veterinary services on the European market.

The European Clinic Council adopted 'The directive regarding the acknowledgement of professional qualifications" including veterinary medicine professional regulations.

According to the European directives, the veterinary surgeons that practise in the EU have gradually reached a complex of attributions, established by law, which covers a large area of responsibilities towards the animals, products of animal origin, intracommunitarian commerce and imports.

Education, professional skills and attitude are essential elements for a veterinary surgeon.

The National System of Continuous Education in Veterinary Medicine aims at maintaining the veterinary surgeons at an acceptable level of competence, offering the opportunity of being permanently in touch with the latest theoretical and practical knowledge. Moreover, the veterinary education is very useful for the specialists who change, at a given moment, the domain of professional activity.

In order to fulfil the **process of continuous training**, an important stage is the participation of the veterinary surgeons at round tables and scientific symposiums organized by the Faculty of Veterinary Medicine Iasi. Here they can find out the latest novelties in the veterinary field (scientific papers, equipment, medicine products).

Courses of continuous professional education organized by the Faculty of Veterinary Medicine Iasi.

Courses organized in 2008

County	Title of the course	No. participants	No. total hours/ course
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Diagnosis and therapy of mammary and genital tumours at domestic carnivores	774	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Nutrition and metabolism disorders at farm animals	996	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Nutrition and metabolism disorders at companion animals	846	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Strategies of prevention and control of major and emerging contagious diseases of animals	954	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Respiratory infectious diseases of cattle: diagnosis, prevention and control	810	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Atopic dermatitis at carnivores	702	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Ketoses at ruminants	945	9

Courses organized in 2009

County	Title of the course	No. participants	No. total hours/ course
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Major contagious diseases and emerging zoonoses: strategies of prevention and control	801	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Latest in the infectious pathology of farm animals	734	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Diagnosis and therapy of gastroenteritis of young animal farms	828	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Importance of the biochemical tests of blood and urine in the complex diagnosis of the interne diseases at companion animals	522	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Clinical and therapeutic management of fractures at companion animals	903	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Biotechnologies in animal reproduction Artificial inseminations, inducing and synchronizing rut at farm animals.	704	9

Courses organized in 2010

County	Title of the course	No. participants	No. total hours/ course
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Sterility at cow, diagnosis and treatment	849	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Implementation of clinical and interventional echography at animals	914	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Epidemiologic surveillance : principles, protocols, national and international surveillance systems	844	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Necropsy diagnosis at companion animals	753	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Clinical and diagnosis coordinates in the main intoxications at animals. Therapeutic approach: general and specific antidotes.	810	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Latest in diagnosis and surveillance of parasitical diseases at animals.	840	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Diagnosis and treatment in spinal cord supervision at dog.	780	9
Bacău, Brăila, Botoşani Galaţi, Iaşi, Neamţ Suceava, Vaslui, Vrancea	Preliminary requirements in management of food quality and safety.	873	9

11.2. Comments

The curriculum of the continuous training themes contributes at aligning the training development to the progress of veterinary medicine.

The themes presented in the programme of continuous training have been drawn up by the academic staff of the Faculty of Veterinary Medicine on basis of the casuistry from the faculty clinics and animal husbandry farms.

The faculty has collaboration conventions with A.N.S.V.S.A. (National Sanitary Veterinary Authority and for Food Safety), national veterinary laboratories, laboratories of food control from the main towns, for exchanging information and professional messages.

The themes lectured have shown that it is absolutely necessary to keep a constant contact between education and veterinary practice. Thus, the latest professional information, knowledge of new clinical procedures and official strategies of diseases prevention and control in animals are at hand.

We consider that the seminars developed adequately, the themes were interesting, and the lectures drew the attention of the participants, being a real benefit for their profession.

The topics tackled in the seminars with the veterinary surgeon practitioners were varied, dealing with subjects such as: dermatology, reproduction pathology, echography techniques, surgical pathology, infectious diseases and preventive medicine, medical pathology, microbiology, nutrition and metabolism disorders, reproduction biotechnics, parasitology and toxicology.

The continuous training of veterinary surgeons accomplished the increase of the information, competence and performance level of the practitioners, and also the stimulation of internal cohesion regarding the affiliation to an elite professional organization.

The Faculty of Veterinary Medicine Iasi, together with the General Association of Veterinary Surgeons of Romania and The Board of the Veterinary Surgeons from the Eastern Romania has organized trainings. At the same time the faculty organizes conferences, roundtables, practical demonstrations where the veterinary surgeons obtain certificates with credits necessary for the professional qualification.

We should mention that the interest of the Romanian veterinary surgeons for continuous training is increasing.

The National System of Continuous Education should be sustained specially to organise simple, practical and operative seminars (monthly on different topics) for all veterinary surgeons.

11.3. Suggestions

The themes of the Professional Programme of Continuous Education should be established in accordance with the demands of the veterinary sanitary authorities and depending on the epidemiological situation in different regions.

Improvement of knowledge on the European Union legislation and alignment of the internal legislation to it.

Initiation and stimulation of Romanian veterinary surgeons to take part in the European programmes both by direct contact and by the coordination of the local and national authorities.

In the future, these courses should be organised for the practical training of the participants. This requires the organization of groups of 15-20 participants on various themes.

The financing of the lecturers and preparation of the themes of the seminars should be ensured by the Veterinary Sanitary Centre and the Board of the Veterinary Surgeons of Romania.

Organization of seminars on specializations such as: farm animals, companion animals, legislation and veterinary sanitary control of products of animal origin.

The future aims of the veterinary surgeon should be: prevention of contagious disease, veterinary education and legislation, responsible distribution and use of veterinary medicines, food safety, animal welfare and regional cooperation of the veterinary surgeons.

This education system should continue, as it is imperative and is a “balloon of oxygen” for many veterinary surgeons.

The enlargement of the programme could be made in two ways: first part: theoretical that can be held within the Faculty for 1-3 months, and the second one: practical implementation in counties where there are the veterinary surgeons, farms and veterinary clinics.

Organization and implementation of the national system of continuous education should be accomplished with the cooperation of the education institutions, scientific institutions and professional organizations as per EU and national legislation.

The themes of the courses should be as varied as possible, divided in general and regional topics adapted to the real situation from each county.

In future, we consider that, for a good development of the seminars, they should end by testing the participants on the discussed topic.

CHAPTER 12

POSTGRADUATE EDUCATION

12.1. Factual information

According to the Bologna process – 1999 regarding the university education on cycles, the Faculty of Veterinary Medicine Iasi has as **fundamental objective** the training of general veterinary surgeons, specialists of high level, by organizing the following activities: university studies (Cycle 1 – Licence), postgraduate studies (Cycle 2 – Master), research (Cycle 3 – PhD).

At the same time, the faculty works according to the Directive 36/2005/EC of the European Parliament, art. 11 and 19 regarding the liberal profession of veterinary surgeon at European standards. This European directive states that Cycle 2 of Master is included in the Cycle 1 of Licence, and the graduation diploma of veterinary surgeon is equivalent to Bologna Cycles 1 and 2.

At FVM Iasi, the postgraduate specialization of **Advanced Degree Studies** running for a year, was introduced in 1998 with the specializations: *Control of animal origin products and laboratory diagnosis, Clinical epidemiology and medical therapy.* In 2003, the Master specialization of 1.5 years was introduced to 5 specializations: *Sanitary veterinary epidemiology and legislation, Inspection and control of animal origin products, Laboratory diagnosis, Veterinary clinics and therapy, Veterinary pharmacy.*

12.2. Postgraduate education at FVM Iasi

At FVM Iasi, the postgraduate education comprises the Master cycle (1.5 years) and PhD cycle (4 years). The programmes of advanced training and scientific research are approved by the Council of the Faculty of Veterinary Medicine and by the Rector of the University.

12.2.1. Postgraduate specializations /Master studies

From 2008 to 2010, the Faculty of Veterinary Medicine Iasi organized master courses at 5 specializations, with 50 budgeted positions.

Nr. Crt.	Specializations	Period	No. of students		
			Candidates	Admitted	Graduates
1	Sanitary veterinary epidemiology and legislation	3 semesters	22	22	17
2	Inspection and control of animal origin products	3 semesters	35	35	21
3	Laboratory diagnosis	3 semesters	26	22	16
4	Veterinary clinics and therapy	3 semesters	20	20	17
5	Veterinary pharmacy	3 semesters	Virtual		

Nr. Crt.	Specializations	Length of time	Average of the hours per week / course+ PW/semester		
			I	II	III
1	Sanitary veterinary epidemiology and legislation	3 semester	17	12	Practice for dissertation paper
2	Inspection and control of animal origin products	3 semester	12	12	
3	Laboratory diagnosis	3 semester	16	14	
4	Veterinary clinics and therapy	3 semester	14	13	
5	Veterinary pharmacy	3 semester	Virtual		

It is a tradition in our university and it is also in compliance with the Romanian veterinary regulations that the master courses should be finished by a dissertation paper, i.e. the presentation of both a theoretical and experimental study on a given theme.

The themes of the dissertation papers are established during the studies. The research is done according to a plan decided together with the supervisor.

From 2008 to 2010, there were finished 17 papers in *Sanitary veterinary epidemiology and legislation,* 17 papers in *Veterinary clinics and therapy*, 21 papers in *Inspection and control of animal origin products* and 16 papers in *Laboratory diagnosis.*

Starting with 2011-2012, the postgraduate specialization / Master Studies (Cycle 2) will be included in Cycle 1 – Licence, 6 years' length.

12.2.2. Postgraduate Specialization / PhD Studies

The postgraduate education was well represented in the system of PhD studies. The PhD educational programme of 2008-2009 is presented below.

1. The total number of **PhD supervisors** in veterinary medicine at FVM Iasi: **20**

Nr. Crt.	Scientific supervisor	Specialization
1	PhD. Prof. Mihai Carp-Cărare	Microbiology -Immunology
2	PhD. Prof. Ioan Paul	Normal and pathologic morphology
3	PhD. Prof. Vasile Coțofan	
4	PhD. Prof. Otilia Coțofan	
5	PhD. Prof. Corneliu Cotea	
6	PhD. Prof. Octavian Oprean	
7	PhD. Prof. Ioan Burtan	Surgical pathology
8	PhD. Prof. Ioan Coman	Zoo hygiene
9	PhD. Prof. Nicolae Hagiu	Semiology and medical pathology
10	PhD. Prof. Solcan Gheorghe	
11	PhD. Prof. Vulpe Vasile	

12	PhD. Prof. Liviu Runceanu	Obstetrics and veterinary andrology
13	PhD. Prof. Dan Drugociu	
14	PhD. Prof. Eusebie Şindilar	Sanitary veterinary technology and expertise
15	PhD. Prof. Tudor Perianu	Infectious diseases
16	PhD. Prof. Savuța Gheorghe	
17	PhD. Prof. Velescu Elena	
18	PhD. Prof. Elena Marcu	Normal and pathologic physiology
19	PhD. Prof. Paul Cura	Pharmacology and toxicology
20	PhD. Prof. Miron Liviu	Parasitical diseases

2. Total number of students (2008-2009) - 125, of which:
- full-time (4 years of study): 39
- part-time (6 years of studies) state-budgeted: 42
- part-time (6 years of studies) with fee: 44, of which 1 foreign student (Greece).

Of the total of 125 students, 11 are non-veterinarians.

In 2008, UASVM Iasi, as an Institution organizing the PhD Studies (ISOUD), the Department of Doctoral Studies applied for and won a European project of "POS-DRU" structural funds. At FVM Iasi, after the entrance examination, 9 PhD students enrolled full-time on 1st October 2008 and 12 in 2009. The distribution and number of the PhD students in the POS-DRU programme for 2008-2009 is presented in the following table.

NR. CRT.	**Specialization**	**No. PhD. students**	**SCIENTIFIC SUPERVISOR**
1.	Microbiology and immunology	2	PhD. Prof. Mihai CARP - CĂRARE
2.	Normal and pathologic morphology	2	PhD. Prof. Corneliu COTEA
		4	PhD. Prof. Octavian – Zaharie OPREAN
3.	Semiology and medical pathology	3	PhD. Prof. Gheorghe SOLCAN
4.	Obstetrics and veterinary andrology	3	PhD. Prof. Dan DRUGOCIU
5.	Infectious diseases	4	PhD. Prof. Gheorghe SAVUȚA
6.	Infectious diseases	3	PhD. Prof. Elena VELESCU
7.	Parasitical diseases	3	PhD. Prof. Liviu MIRON
	TOTAL	**24**	

In the period 2008 - 2009, **26 PhD theses** were presented.

The full-time PhD students have a monthly scholarship throughout the period of studies (4 years).

12.3. Comments

The postgraduate education should be further developed by introducing some specialization modules in Cycle 1 of Licence, which would offer the graduates supplementary competences for General veterinary surgery, giving them the opportunity to integrate in the labour market of Romania and EU.

The highest level of education provided by the PhD study programme (Cycle 3) should become an integrated part of the didactic and research programmes. In order to increase the quality of post-graduate specialization, the scientific doctorate should be organized only full time.

12.4. Suggestions

According to the Romanian legislative regulations for postgraduate clinical training, in veterinary medicine, unlike the human medicine, the educational regulations similar to the intern and resident stages that are in the EU are not acknowledged.

In order to introduce the postgraduate professional training of intern and resident stage type, proposals will be made at the Ministry of Education and Research, Ministry of Agriculture and National Authority for Veterinary Medicine and for Food Safety.

To harmonize the training programmes to those approved in the EU, our faculty aims at developing specialization courses in various limited domains, such as: anaesthesia, radiology, veterinary echography, veterinary ophthalmology, milk cow pathology etc.

CHAPTER 13

RESEARCH

13.1. Factual information

The Faculty of Veterinary Medicine Iasi is an institution of higher education that has become well-known in the domain of scientific research due to its team of specialists. The proof of its prestige is the high number of research projects (over 30 in the last 3 years), financed by the government (Ministry of Education and Research) and by foreign beneficiaries (European Union).

The local and national financing of the research themes has been obtained by the representatives of various disciplines, but also as a result of the interdisciplinary collaboration within the University Centre of Veterinary Medical Research Iasi, in pathology and comparative medicine, public health and food safety.

The collaboration contracts, including the practice of students, were mostly established through Socrates conventions with Ecole Nationale Veterinaire Alfort, FVM Lisbon – Portugal, FVM Liege, FVM Liverpool, Institute Superieur d'Agriculture Lille, FVM Bari, Bologna and Napoli.

The activity of scientific research of the students will be presented including the coordination of this activity, the place of practical training as well as the objectivity and validity of the results.

During the research activity, the professors train those students who show interest in this field of medical training or those who do researches for the licence paper. The professors become coordinators of the students' research activity and are responsible for their results.

The research activity takes place in the research laboratories of the disciplines, other than those allocated for the laboratory works of the students. The disciplines that train students in the research activity are both basic and clinical disciplines.

Great effort has been made for the research equipment to be modernized, but not all the laboratories have the latest technology. Despite these shortcomings, the students can enrich the amount of knowledge during the courses.

Three major objectives can be identified in these research activities:

- investigations for elaborating the licence paper on a given theme;
- investigations developed by the students who join a subject within the student workshops;
- investigations within the research projects.

Research activity developed for the elaboration of the diploma paper

All students participate in this activity starting with the 4th year of study. It unfolds along 4 semesters, including 3 stages of practice (4th and 5th years - 3 weeks, and 6th year – 6 weeks) and ends with the presentation of the paper before the licence commission. Usually the students decide at which subject they want to do the licence research and the coordinator suggests the topic. Afterwards, the research protocol and theme of the diploma paper are discussed and approved by the Academic Council of the Faculty. The diploma paper has two parts: the former includes a bibliographical study on the theme, and the latter the research discussed and interpreted with the coordinator. In order to pass this examination, the students should obtain al least 6 (on a scale from 1 to 10).

Researches of the students enrolled at various workshops of certain disciplines

These student workshops are available for all interested students, according to everyone's wish and available time, a team doing the research within a subject on different themes along the year. The collaboration students are from different years, thus enforcing the team spirit, while the debates allow the experience exchange among the participants, who learn to develop an experiment, analyse the data and write scientific papers. It completes the professional profile of the students and improves the medical thinking. The students communicate and publish the results of their research at the Annual Student Symposium of the University of Agricultural Sciences and Veterinary Medicine Iasi or of other faculties. In order to stimulate the students' participation at the symposium, the most valuable researches are awarded and published in the Scientific Year-book of the faculty (Scientific papers USAMV Iasi, series Veterinary Medicine, ISSN 1454-7406). The presentation of these papers and the awards at these symposiums are some of the evaluation criteria of scientific value of the licence paper and the classification of the student.

Some representatives of the International Association of the Students of Veterinary Medicine (IVSA) participate at the International Student Symposium organized by the Association.

Investigations in research projects

The students are allowed to participate, together with a research team, in research projects. Generally the research has an interdisciplinary character, and develops under the surveillance of a team coordinator. Other institutions within the faculty are involved. These students are generally chosen from those that are members of different scientific workshops and who have proved their competences and interest in research.

Up to 10% of the students can be chosen to take part in this activity. The final result is presented in papers and presentations at national and international symposiums where the students are enlisted as participants.

Other information regarding the scientific research of the students

The time granted by the students to the scientific research has not been rigorously monitored for all the objectives of the research, but according to the coordinators, it can vary from 6 to 8 hours a week within the final stage for drawing up the diploma paper (6^{th} year). The practical activity in the laboratory is combined with the study of specialized literature for the first part of the paper elaboration. In order to overcome the limitations caused by the lack of funds for consumable materials, animals for experiments etc, some themes are part of research projects from various subjects.

13.2. Comments

FVM Iasi has an adequate infrastructure and an equipped library to satisfy the requirements of student scientific research.

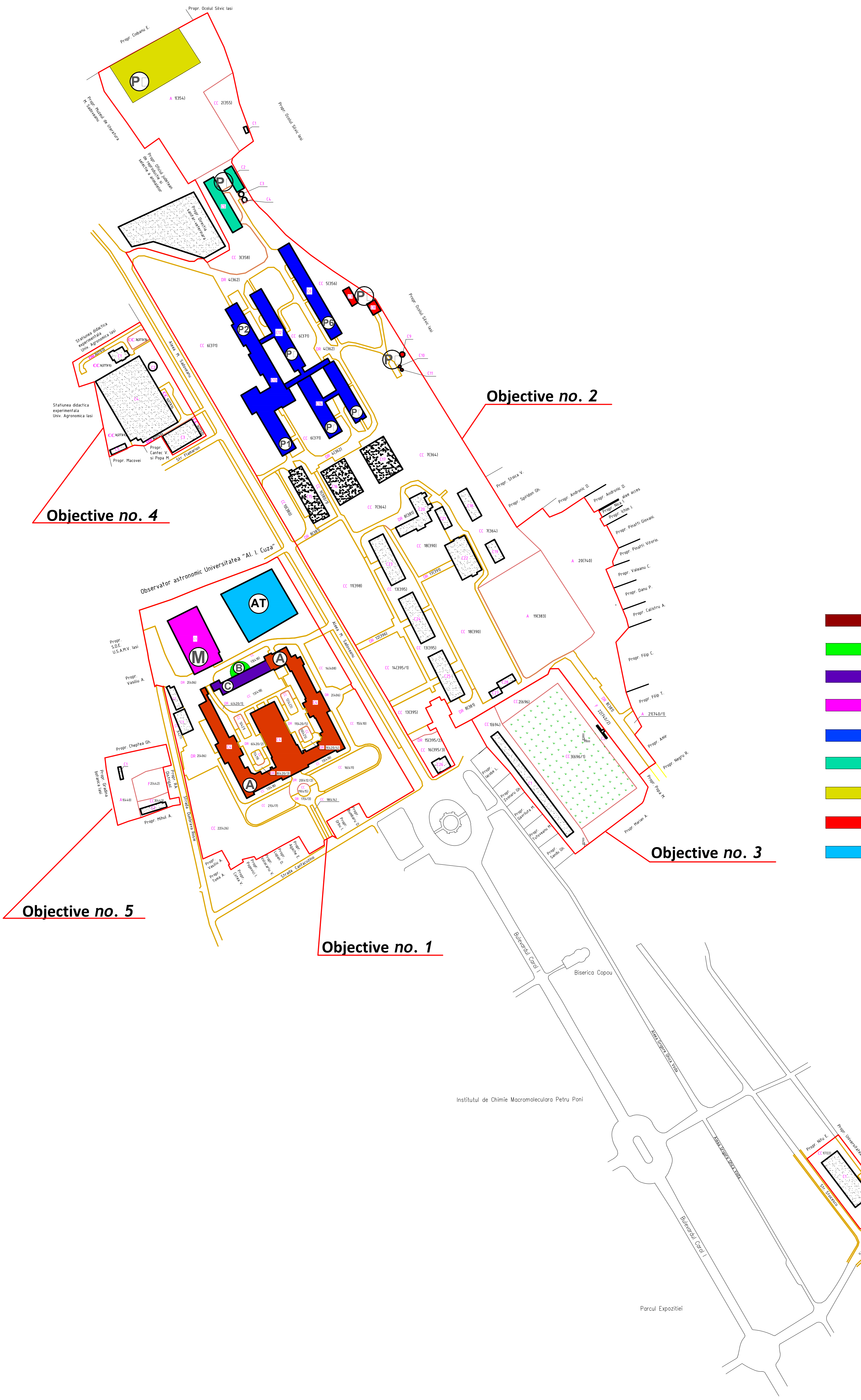
The students have access to the specially designed areas of scientific research and also have the possibility to familiarize with the research equipment specific to different subjects. Although the laboratories are not equipped at the highest level of performance, there is the possibility to accomplish quality research, most of them meeting the requirements of the national veterinary activity. Thus the students can integrate in groups of multidisciplinary research, having the opportunity to enlarge their knowledge through practical works in various sectors of veterinary research. Taking part in the multi-institutional research projects allows the students to use the research equipment of other institutions of higher education (Faculty of Human Medicine Iasi, Faculty of Biology). Although, on the whole, we consider the research activity of the students good, their implication should increase especially in the activities that take place in centres of high performance or prestigious laboratories within the faculty.

Some students that take part in international programmes which involve student exchange (Socrates) have access to the research infrastructure of the faculties which they visit and with guidance from experts of those educational establishments.

13.3. Suggestions

Encouraging the students to take part in the programmes of student exchange enlarges the future of research as well as the level of theoretical training, as the faculties preferred by the students are better equipped than the Faculty of Iasi. The increase of the number of European universities in the Socrates programmes offers to our faculty many training opportunities of research in accordance with the students' interests as well as the research profile of the Faculty.

The newly signed contracts between the Faculty of Iasi and other institutions (National Institute of Diagnosis and Animal Health, Pasteur Institute) on scientific research, offers the students access to a better infrastructure. It is essential to bring a larger number of students in the research activity such as projects.



LEGEND

Objective. 1: Central Hall U.S.A.M.V. Iasi

Aleea M. Sadoveanu, nr. 3

Objective.2 : Veterinary clinics, students accommodation and sports hall

Aleea M. Sadoveanu, nr. 4-6-8

Surface from measurements = 12.2848 ha

Built surface = 15 170.93mp

Objective. 3: Rugby Stadium *"Gorun Sandu - Ville",*

Aleea Grigore Ghica voda,f.n.

Surface from measurements = 1.5168 ha

Built surface= 1 017.60mp

Objective. 4: Guesthouse and greenhouse

Aleea M. Sadoveanu, nr. 7

Surface from measurements = 0.8839 ha

Built surface= 4384.55mp

Objective. 5: Weather station

Str. Dumbrava Rosie, nr. 31

Surface from measurements = 0.3567 ha

Built surface = 179.09mp

Objective. 6: Student Canteen "T©rguкor Copou"

Str. Stoicescu, nr. 1A

Surface from measurements = 0.3030 ha

Built surface= 1 012.74mp

U.S.A.M.V. " Ion Ionescu de la Brad " Iasi

Aleea M. Sadoveanu, nr. 3

Surface from measurements = 19.9074 ha

Built surface= 30 300,90mp

A □A□RONOM□

B □LIBRAR□

C □CHEMISTR□

M □MECHANIZATION

P1 □P6 □VETERINAR□

P□ □LABORATORY ANIMALS SHELTER

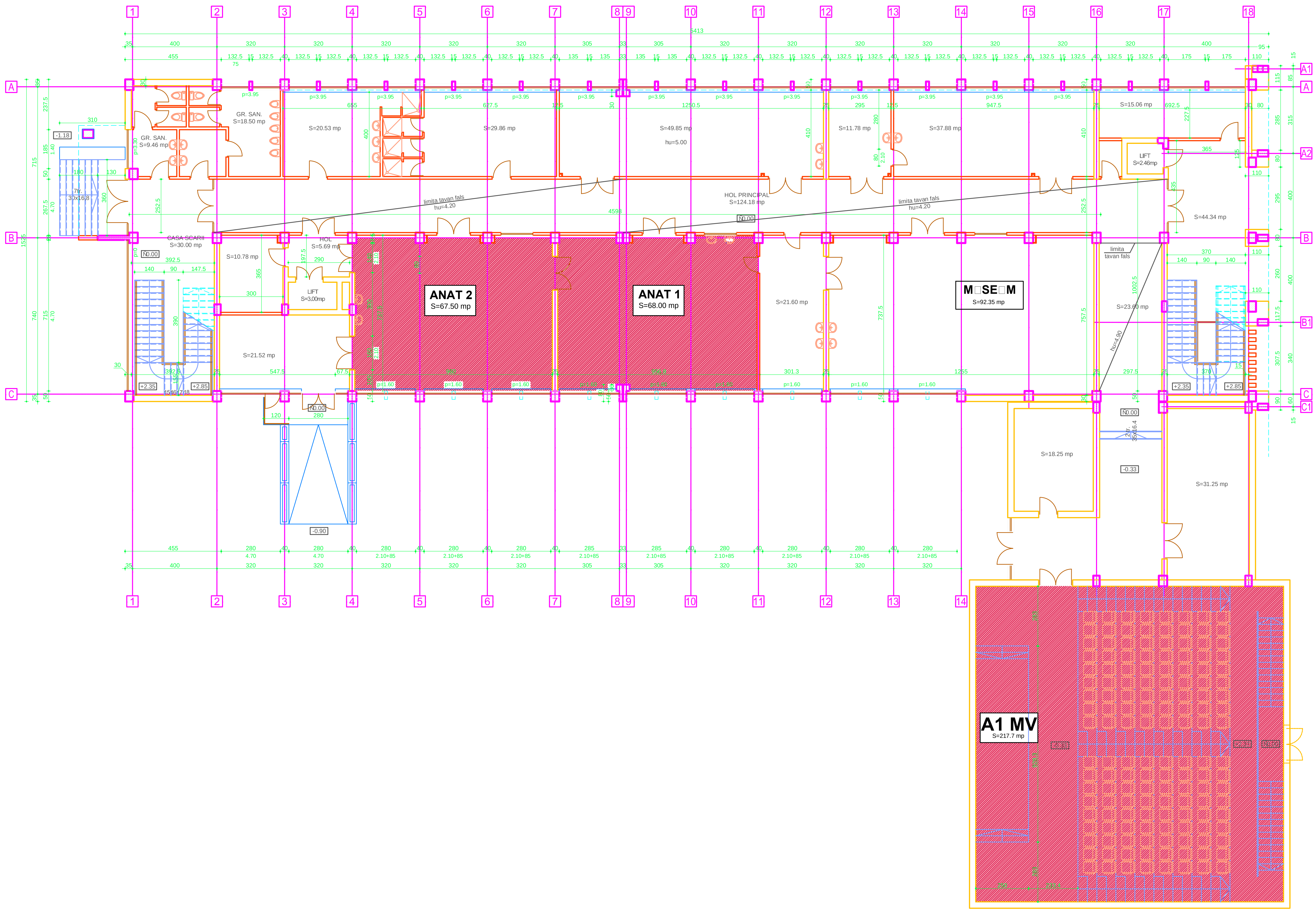
P□ □HORSE CENTER

P□ □CREMATORIUM

AT □ALIMENTAR TEHNOLOGY

SITE PLAN AND CADASTRAL BOUNDARIES
UNIVERSITY OF AGRICULTURAL SCIENCE AND VETERINARY MEDICINE
" Ion Ionescu de la Brad " Iasi

ANNEX I



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A1 MV
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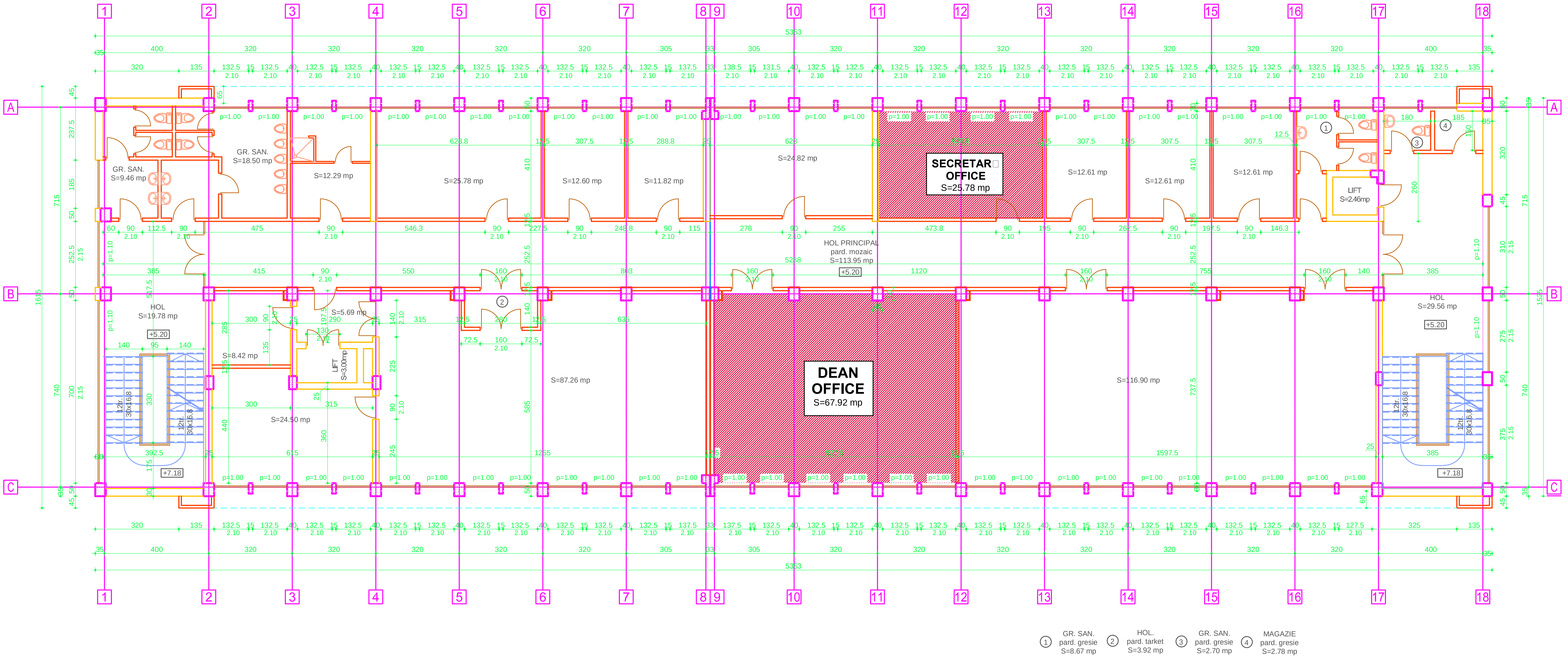
ANNEX II.P1.0



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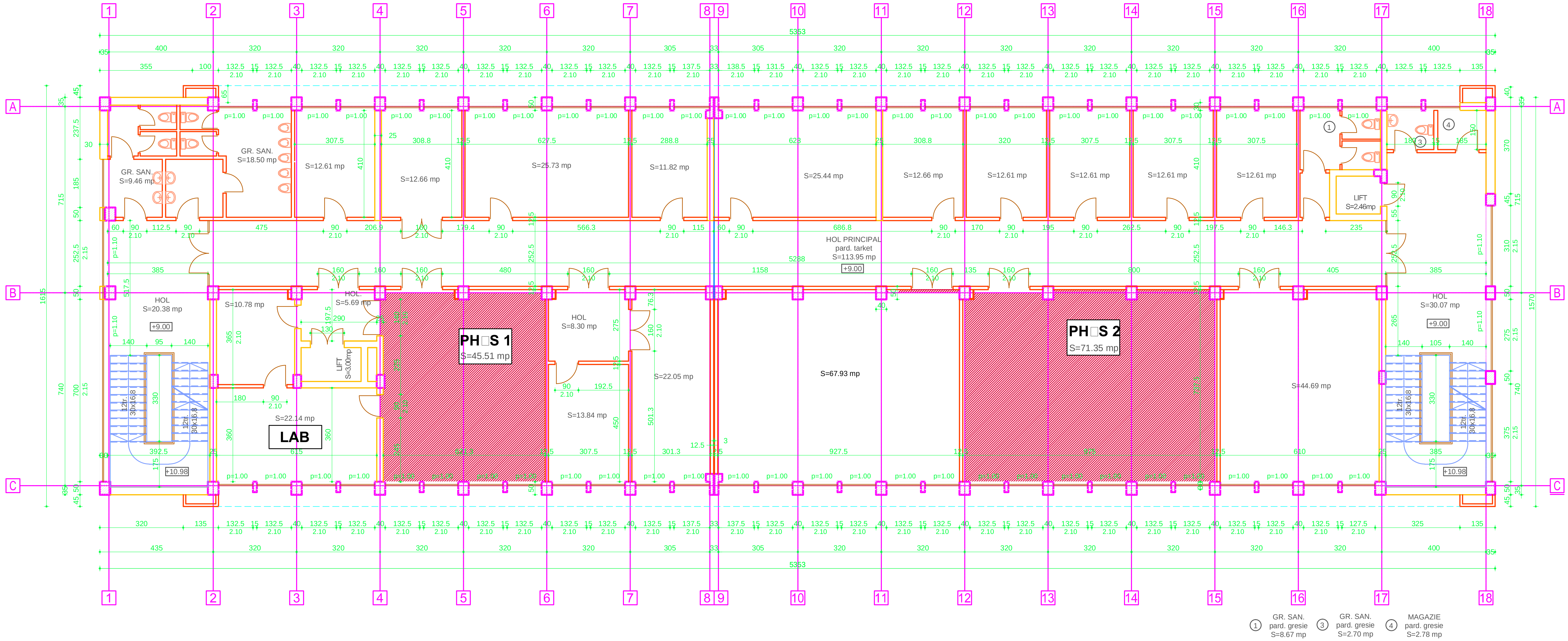

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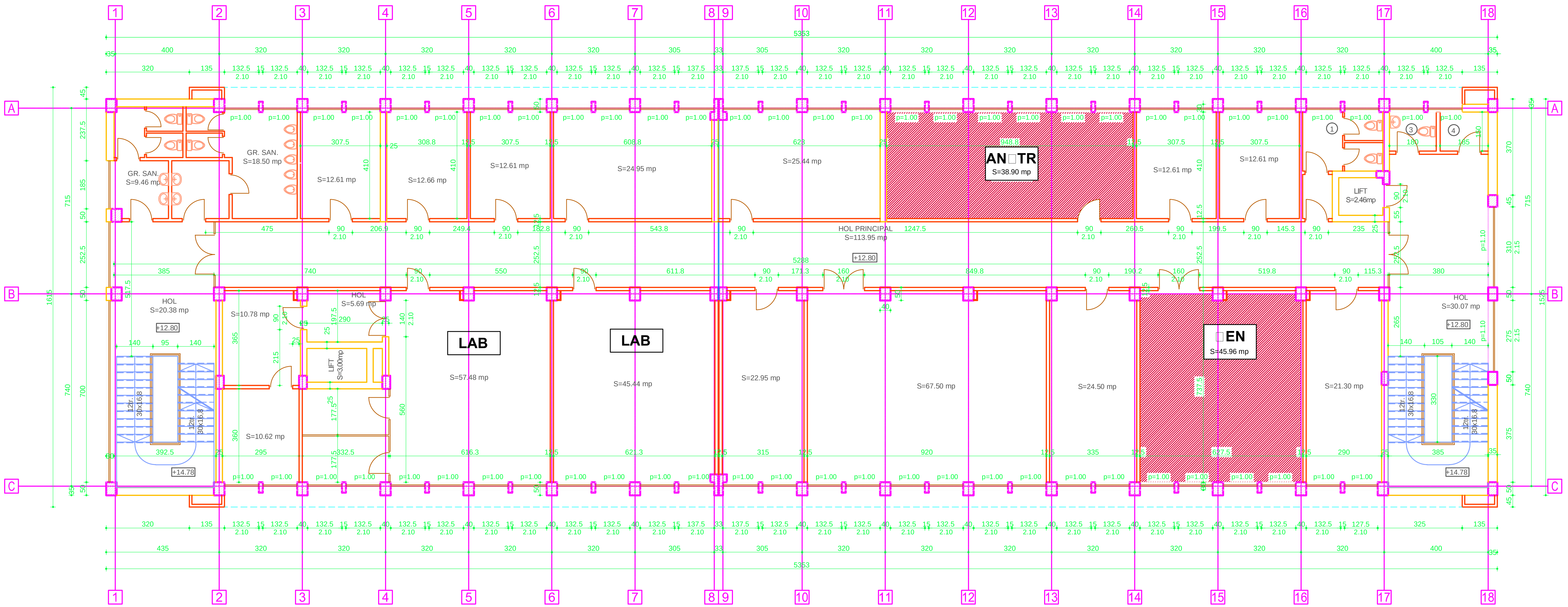

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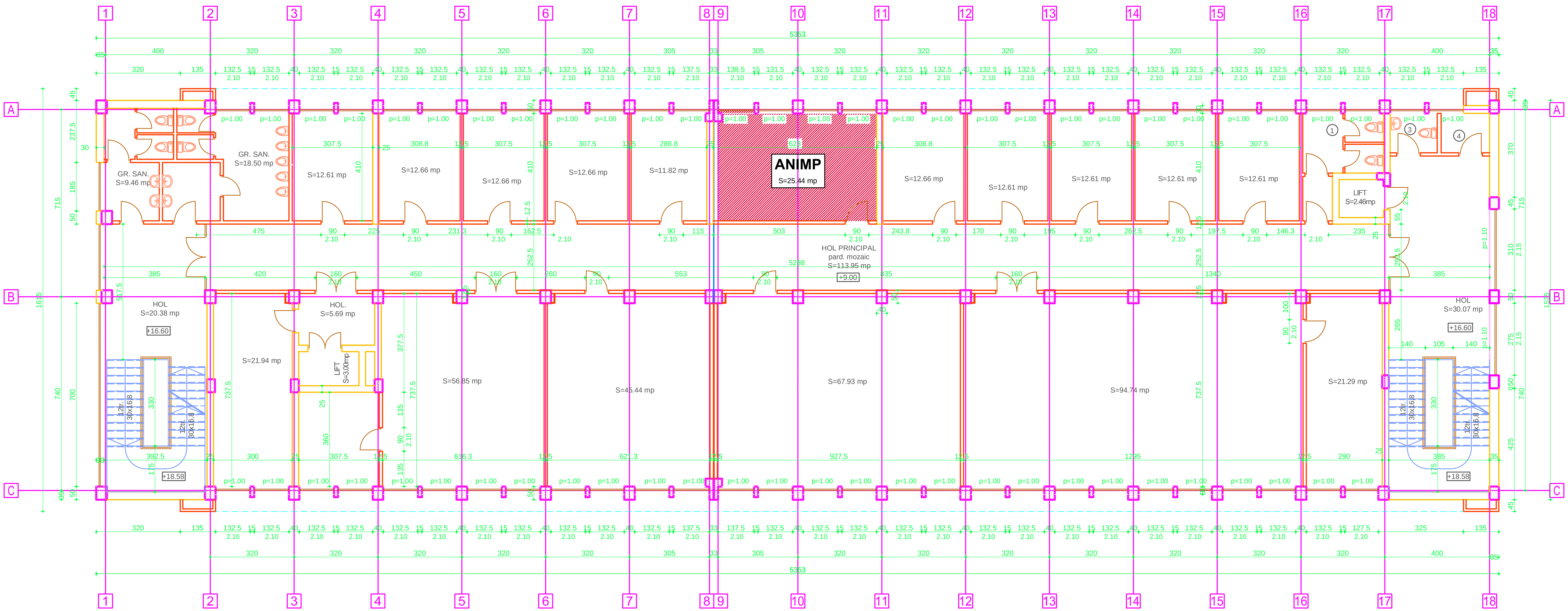

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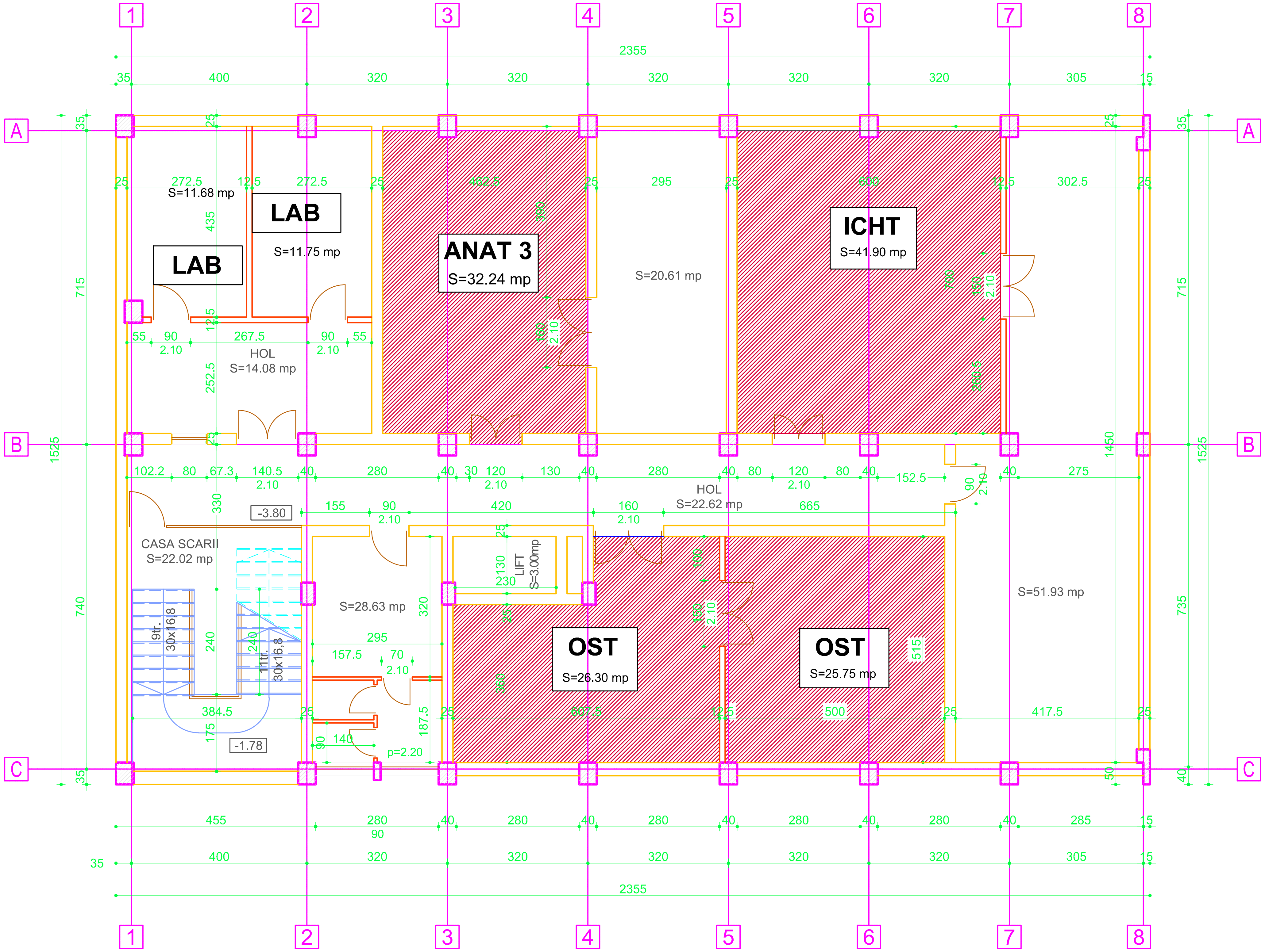
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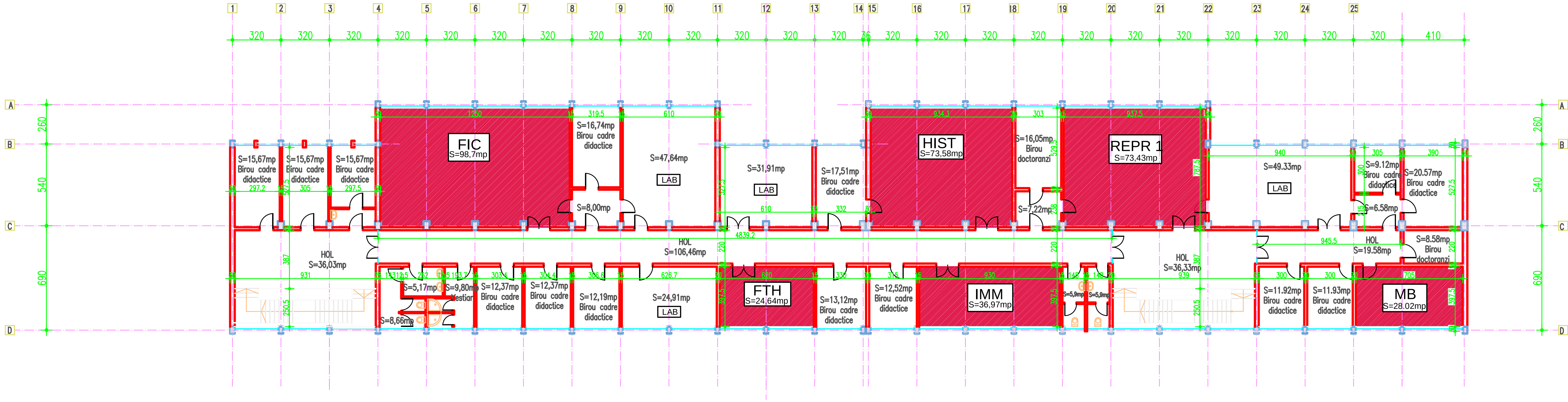
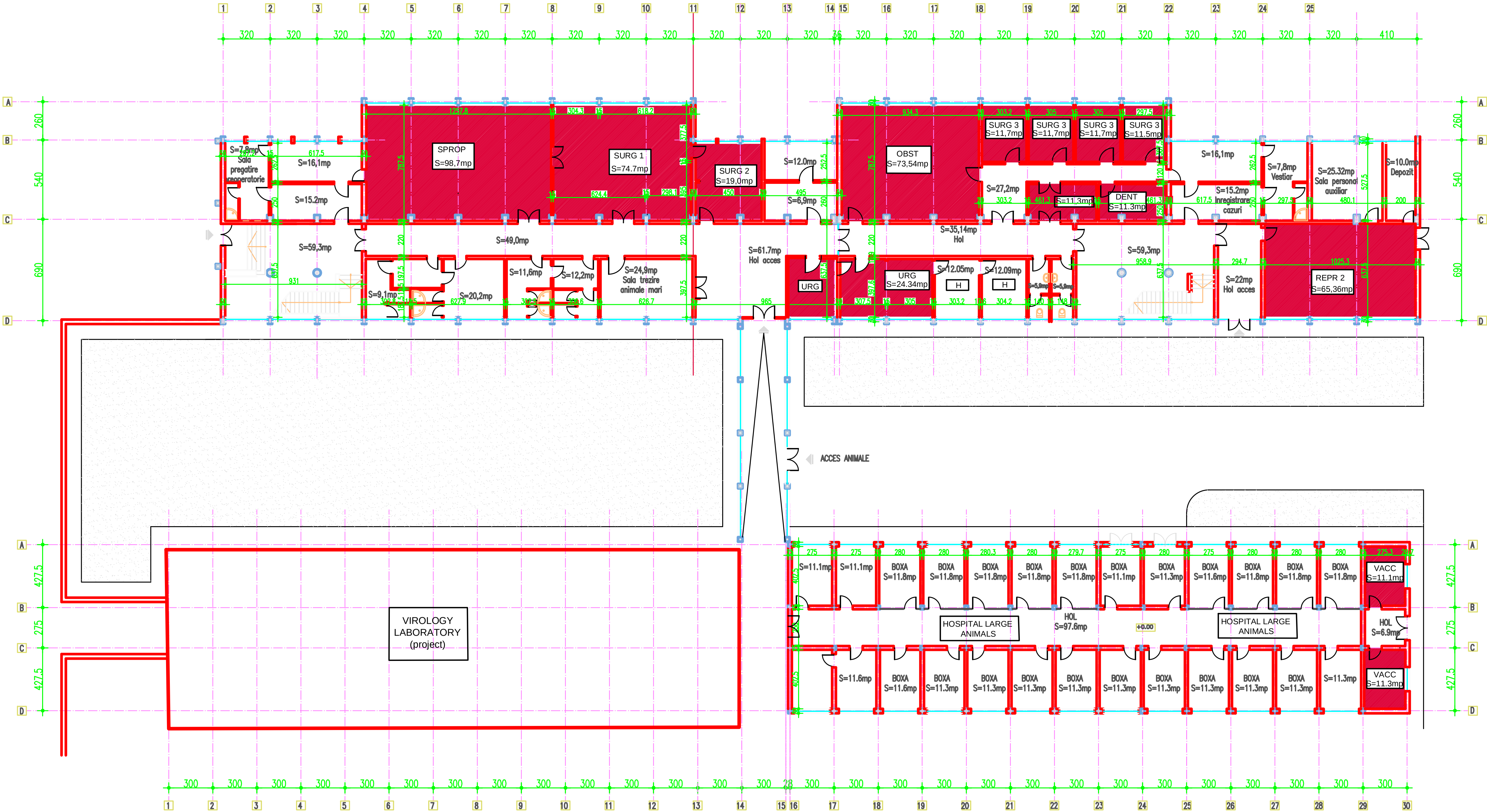
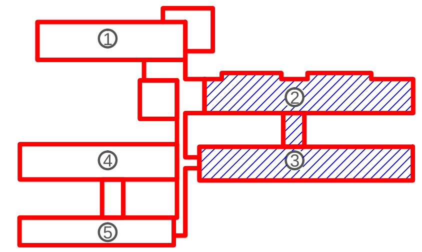
OST
S=25.75 mp
S=51.93 mp

ANNEX II.P1.-1

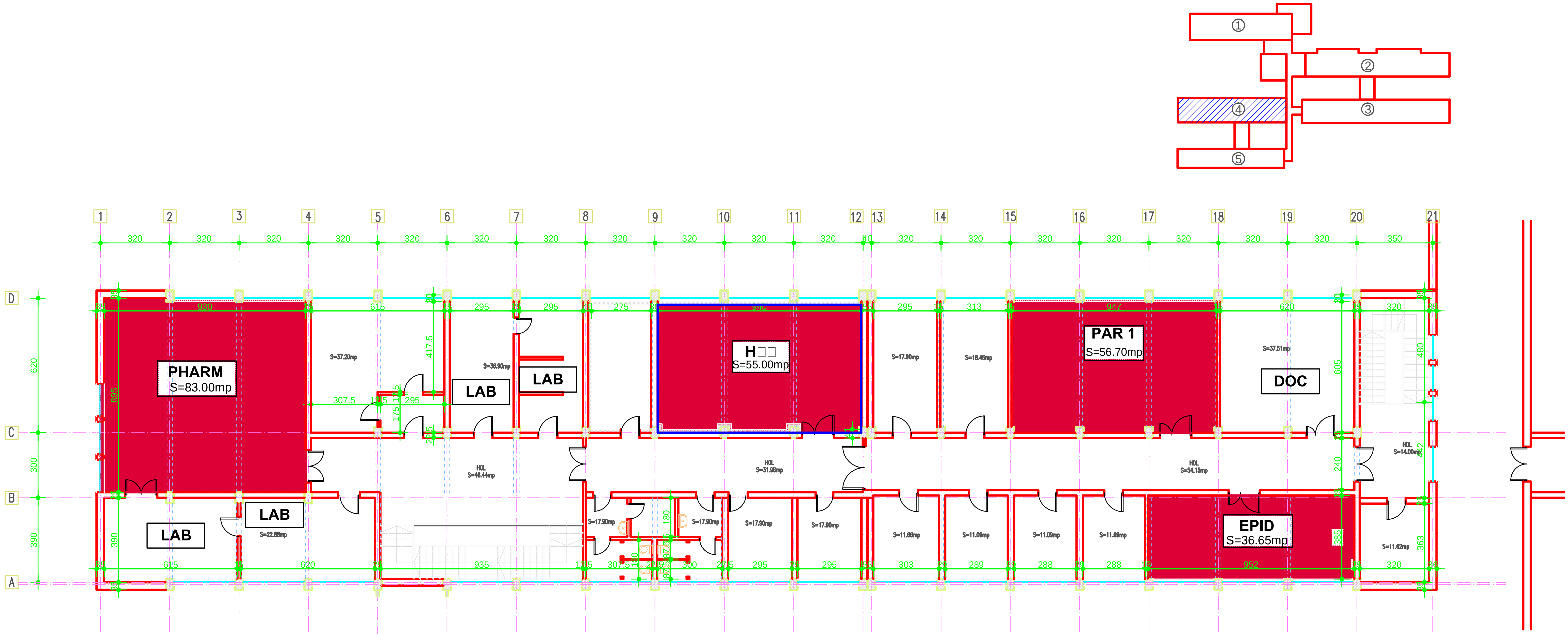


ANNEX III.P2.1

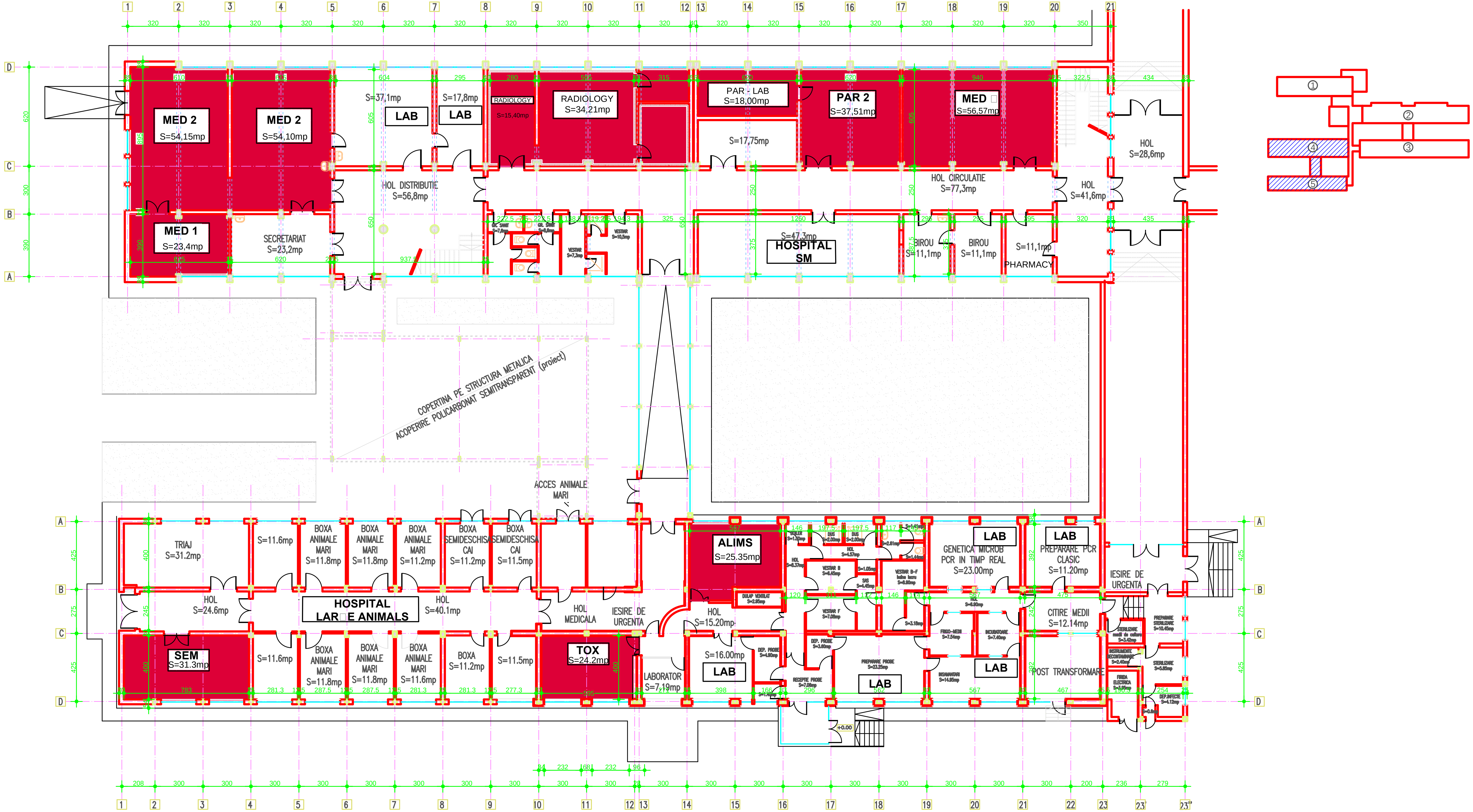




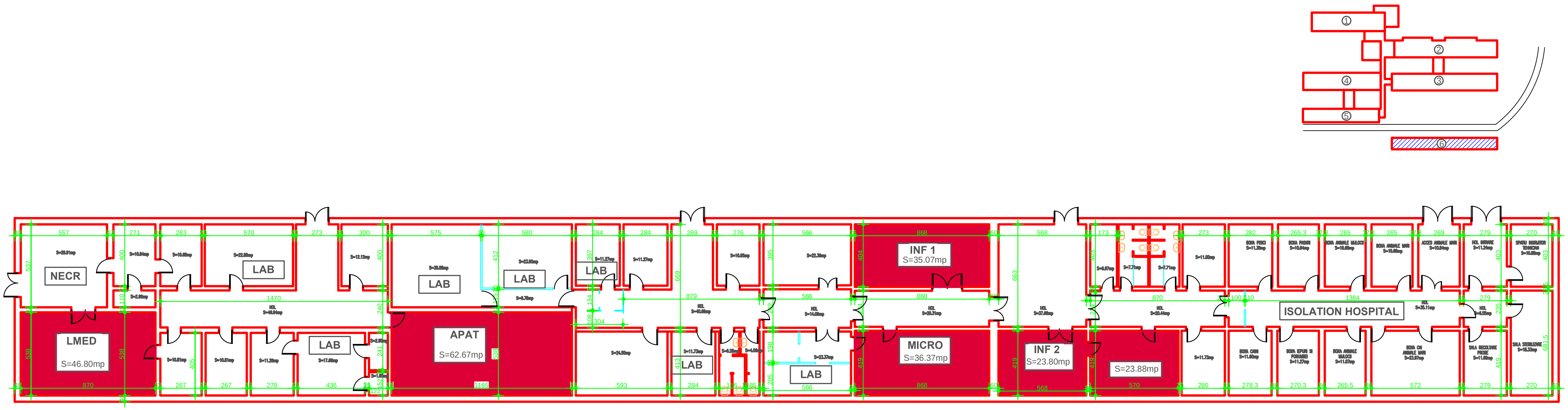
ANNEX III.P2.0+ P3.0


PHARM
S=83.00mp
LAB
LAB
LAB
LAB
H□□
S=55.00mp
PAR 1
S=56.70mp
DOC
EPID
S=36.65mp
HOL
S=46.44mp
HOL
S=31.98mp
HOL
S=54.15mp

ANNEX IV.P□1



ANNEX IV.P□0□P□0


NECR
LMED
S=46.80mp
LAB
LAB
LAB
LAB
APAT
S=62.67mp
LAB
LAB
LAB
INF 1
S=35.07mp
MICRO
S=36.37mp
INF 2
S=23.80mp
S=23.88mp
ISOLATION HOSPITAL

ANNEX V.P6.0