Teaching Equine Sciences and Technics in Italy

F. Martuzzi, A. L. Catalano and S. Filippini
University of Parma, Veterinary Medicine Faculty, Department of Animal Production, via del Taglio 8, 43100 Parma
martuzzi@unipr.it

Summary

Italy has a horse population of about 300.000 horses. The need of educated people in the sector was noticed since long time. With the reform of the Italian University system many new Animal Science courses were born. Among these the first and only Equine Sciences and Technics three-year course was created in the University of Parma. First year of activation was Academic Year 2002-03. The degree is obtained with 180 credits. Teaching is organized in theoretical and practical hours. The course is intended to prepare students for a career in the equine world, to deepen the knowledge of people involved in that world already, like breeders, instructors, agonists or for those pursuing their passion in horses. 75 students are admitted to the first year. Due to more than 150 requests each year an admission test was necessary. A questionnaire was distributed to the first and second year students to investigate their characteristics (e. g.: provenience area, previous studies, employment, major interest areas, job expectations) and to better finalize the teaching programs. Regarding the different horse categories, the students are mainly interested in saddle horses for show jumping, then in order: thoroughbred for gallop racing and trotters. Among the subjects taught during the course, main interest areas are: nutrition and training techniques. Job expectations are mainly toward training and equine physiotherapy.

Introduction

Italy has a horse population of about 300.000 horses. In Italy there was an ancient tradition of horse breeding, at present partially lost. The Veterinary Faculty of the University of Parma, founded in the 18th century and improved by Duchess Maria Luigia of Austria, second wife of Napoleone Bonaparte, has a history of competence in the equine field. The need of competent people in the equestrian world is felt everywhere and at every level in Italy, but only private and sporadic enterprises were undertaken. Therefore, in the Veterinary Faculty of the University of Parma a new 3 year course in Equine Sciences was created in Academic Year 2002-3.The aim of this course is to enhance the competence of people involved in the horse world: breeders, competitors, instructors, grooms etc.
A session regarding educational aspects in horse production was held at the EAAP 48th Annual Meeting in Vienna in 1997. In that occasion many courses from several European Countries were presented (Bruns; Wallin *et al.*; Holgersson; Herlin *et al.*; Saastamoinen and Laine; Habe; Bodò; Caput; Hecker, 1997). In that year, horse production in Italy was a marginal subject in the Animal Production courses, taken in account only in some Veterinary Medicine Faculties.
Aim of this paper is:

- Share our experience in the creation of the course Equine Sciences, which could be useful for other researchers involved in teaching equine subjects
- Show the results of a survey made among the students of the first 2 years of the course
- Collect suggestions by teachers of other Countries, where equine breeding and industry are more developed
- Promote cooperation and exchanges of students and teachers from other Countries to improve the knowledge and culture in the horse world throughout Europe.

The Course Equine Sciences and Technics

The admission test

The course is comprised in the class of Animal Production Science courses, therefore it had to be built in accordance to a grid of credits and subjects in order to be accepted by the Ministry. At present it is the first and only in Italy. In this kind of course a maximum of 75 students are accepted in the first year. Therefore, an admission test was necessary to select the best students, because the requests have always been more than 150. The test is anonymous, written, regarding: the horse world in Italy, chemistry, physics, biology and general culture.
The test is comprised of 60 multiple choice questions, each having 4 options. Should two students be tied for the last (75^{th}) place, more weight is placed on the general culture portion of the test.

Structure of the course

- In accordance with the 3-year course structure, 180 credits ECTS must be obtained to achieve the degree
- A total of 23 exams must be successfully completed in these three years
- 15 credits must be obtained with practical training following a structure in arrangement with the University (stud farms, horse clinics, racetrack facilities…)
- The student can choose 14 credits of modules or complete courses from other University courses: Veterinary Medicine, Motory Science…
- Specialized personnel and technicians of the horse field are called for seminars and to teach in some modules of the 3rd year courses, due to the extreme specializations of the subjects
- (e.g.: horse racing regulations)

Study scheme structure:
1st year

Subjects	CREDITS	n. of exams
Physics, mathematics, informatics	8	8
Chemistry, biochemistry and biochemical-molecular technologies	12	
Vegetal and animal biology	7	
Equine anatomy	5	
Equine physiology	5	
Economy and management of zootechnical enterprises	10	
Microbiology and epidemiology	5	

English language	3	

Study scheme structure:
2nd year

Subjects	CREDITS	n. of exams
Genetic improvement and equine ethnology	5	9
Morpho-functional evaluation and equine recognization	7	
Elements of general pathology and topics of pathological equine anatomy	4	
Elements of hygiene and prophylaxis of infective and equine parasitic diseases	8	
Equine nutrition	6	
Stud farm technology; characteristics of barns and horse sport facilities	7	
Horse behaviour	3	
Biomechanics, podology, elements of farriery	7	
Grassland management, forage exploitation and elements of agricultural machinery	6	

Study scheme structure:
3rd year

Subjects	CREDITS	n. of exams
Equine reproduction biotechnology, physiopathology and artificial insemination	10	5
Elements of pharmacology and toxicology in equines; equine meat inspection	3	
Elements of diagnostics, pathology and physiotherapy of equines, veterinary legislation; welfare and animal protection regulations	10	
Methodology of breeding, training and employment of equines	8	
Equestrian techniques; horse racing and competition regulations	5	
Courses by choice and practical training Degree thesis	29 7	

Survey among the students

A questionnaire was distributed among the students to obtain information about their background and expectations. The first set of questions was aimed to obtain information about their provenience, age, kind of previous studies.
In the second set of questions their main interests in the horse world were investigated, with the aim of adjusting the programs of the courses accordingly.
The student was requested to indicate his degree of interest from 1 to 4 in each subject.

Results

Some of the survey results are shown in figures n. 1, 2, 3 and 4.

Breeding horses for show jumping is the sector that mostly interest the students (fig. n.1), while racing appears at the second place followed by leisure riding. Nutrition and hygiene are the aspects of husbandry and breeding more requested (fig. n.2). Job expectations are mainly toward equine physiotherapy, fallowed by the hope to become a trainer (fig. n.3).
The most popular equestrian disciplines among the students result jumping, dressage and three-day event (fig.n.4), in accordance with what reported by Hedberg A. and Hegelsson A. (2001) in a survey regarding horse sports in Europe.

Web site: http://www.unipr.it/arpa/facvet/corsi/laureaste/HomePage.html

References

Bodò I. (1997) Higher education programmes for horse production in Hungary. Abstract book of the 48th Annual Meeting of the EAAP, pg. 370
Bruns E.W. (1997) Higher education for horse production at universities in Germany. Abstract book of the 48th Annual Meeting of the EAAP, pg. 367
Caput P. (1997) Higher education programmes for horse production in Croatia. Abstract book of the 48th Annual Meeting of the EAAP, pg. 370
Habe F. (1997) Higher education for horse production in Slovenia. Abstract book of the 48th Annual Meeting of the EAAP, pg. 369
Habe F. (1997) Riding academy of Slovenia and its programmes. Abstract book of the 48th Annual Meeting of the EAAP, pg. 371
Hecker V. (1997) Horse sport education programmes in Hungary. Abstract book of the 48th Annual Meeting of the EAAP, pg. 371
Hedberg A. and Hegelsson A. (2001) Implication of introducing equine services onto farms – A European perspective. Abstract book of the 52nd Annual Meeting of the EAAP, pg. 326
Herlin A. H., Swensson C. and Ventorp M. (1997) Theoretical horse courses for practical people- a meeting place between agriculture and the horse sector. Abstract book of the 48th Annual Meeting of the EAAP, pg. 368
Holgersson A. L., Philipsson J., Dalin G., Morgan K., Planck C. and Wengelin R. (1997) Diploma of higher education in horse management in Sweden. Abstract book of the 48th Annual Meeting of the EAAP, pg. 368
Saastamoinen M.T. and Laine P. (1997) Education of horse professionals in Finland. Abstract book of the 48th Annual Meeting of the EAAP, pg. 369
Wallin L. E., Gerber E., Rundgren M. and Philipsson J. (1997) Equine courses at the Swedish University of Agricultural Sciences for students in the animal science programme for external students. Abstract book of the 48th Annual Meeting of the EAAP, pg. 367

Fig.n.1: field of interest

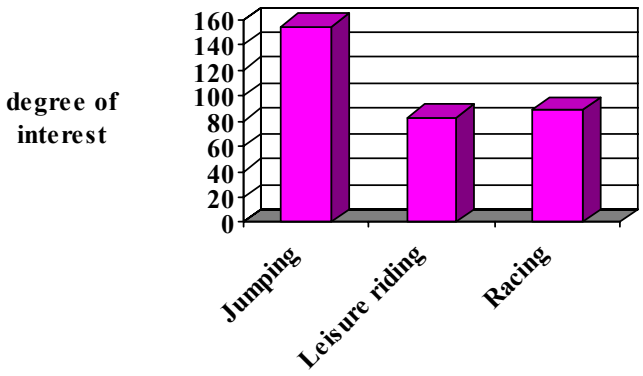

Fig. n. 2: husbandry and breeding aspects

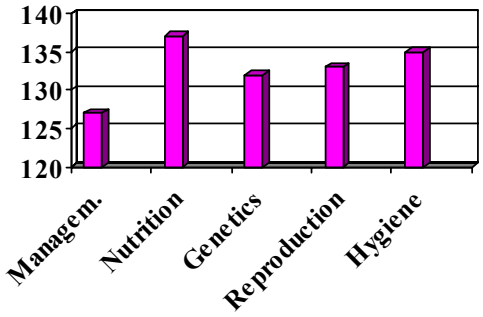

Fig. n. 3: kind of employment

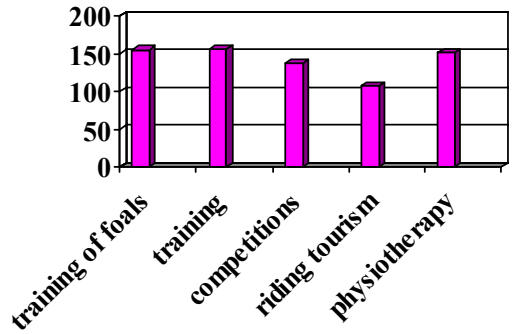

Fig. n. 4: preferred horse sports