ACADEMIC YEAR 2023/2024

General information	
Name of the integrated course	**INFECTIOUS DISEASES 1**
Integrated teaching modules	**Viral Diseases;** **Prophylaxis Of Infectious Diseases.**
Degree course	Single cycle degree in Veterinary Medicine (LM42)
Academic Year	III
European Credit Transfer and Accumulation System (ECTS)	7 (ECTS lessons: 5; ECTS exe/lab/tutor: 2)
Language	Italian
Period of teaching	II 7 week term
Attendance	Mandatory

Teacher	**e-mail address**	**phone**
Nicola Decaro	nicola.decaro@uniba.it	+39 0804679832
Gabriella Elia	gabriella.elia@uniba.it	+39 080 4679805

Headquarters	Campus of Veterinary Medicine, S.P. per Casamassima km 3, 70010 Valenzano
Virtual rooms	Microsoft Teams (access code: n3ufqpi)
Tutoring (time and day)	Wednesday, 11.00-13.00; Thursday, 15.00-17.00

Syllabus	
Learning Objectives	The objective of the teaching course is to transfer the knowledge concerning the etiology, pathogenesis, clinical signs, diagnosis and prophylaxis of the main viral diseases of domestic animals. The student must acquire diagnostic skills, starting from a correct approach the diagnostic procedures up to a rational use of laboratory methods. He/she must also be able to set up adequate control measures against the infectious diseases of animals, also considering the current legislation.
Course prerequisites	Compulsory prerequisite: General pathology. The student must have adequate knowledge and skills concerning the veterinary microbiology and immunology and the pathological changes of cells and tissues.

U.O. Didattica e servizi agli studenti
Strada prov.le 62 per Casamassima, km. 3,00
70010 Valenzano (Bari) - Italy
Tel. (+39) 080 5443944-41-46 • fax (+39) 080 5443939
didattica.veterinaria@uniba.it

Contents of the teaching module: **Viral diseases** Teacher: **Nicola DECARO** **Lectures** **ECTS: 3** **Hours: 39**	The module concerns the clinical sciences of companion, horse and food-producing animals. **Clinical sciences of companion and horse** ➢ Viral diseases of dogs: Canine parvovirus infection; canine minute virus infection; infectious canine hepatitis; infectious canine laryngotracheitis; canine herpesvirus infection; rabies; Aujeszky's disease; canine influenza; canine parainfluenza; canine distemper; canine coronavirus infection. ➢ Viral diseases of cats: feline panleukopenia; feline viral rhinotracheitis; feline calicivirus infection; feline enteric coronavirus infection/feline infectious peritonitis; feline retroviral infections (feline leukemia, feline immunodeficiency); rabies. ➢ Viral diseases of equines: equine rhinopneumonitis; West Nile disease; equine viral arteritis; African horse sickness; equine influenza; equine infectious anemia. **Clinical sciences of food-producing animals**: ➢ Viral diseases of cattle: infectious bovine rhinotracheitis/infectious bovine pustular vulvovaginitis; malignant catarrhal fever; lumpy skin disease; foot and mouth disease; bovine viral diarrhoea/mucosal disease; bovine rotavirus infection; bluetongue; bovine coronavirus infection; bovine parainfluenza; bovine respiratory syncytial virus infection; bovine leukosis. ➢ Viral diseases of sheep and goats: caprine herpesvirus infection; sheeppox, contagious ecthyma; border disease; bluetongue; small ruminant lentivirus infections (Maedi-Visna, caprine arthritis and encephalitis). ➢ Viral diseases of swine: African swine fever; classical swine fever; Aujeszky's disease; foot and mouth disease; swine rotavirus infection; PRRS; swine influenza; swine coronavirus infections. ➢ Prion diseases: transmissible spongiform encephalopathies; scrapie; bovine spongiform encephalopathy.
Contents of the teaching module: **Prophylaxis of infectious diseases** Teacher: **Gabriella ELIA** **Lectures** **ECTS: 2** **Hours: 26** **Practical activities for the integrated course** **ECTS: 2 (1 ECTS of the teaching module "Viral diseases" + 1 ECTS of the teaching module "Prophylaxis of infectious**	The module concerns the clinical sciences of companion and food-producing animals. • **Prophylaxis of infectious diseases** ➢ Host-pathogen interaction. Infection – clinical disease. Types of viral infections. Protection against infections. Direct and indirect prophylaxis. Characteristics of vaccines against infectious diseases. Vaccination protocols in the different animal species. Evaluation of the post-vaccination immunity. Prophylaxis of zoonoses. Animal coronaviruses: generality, taxonomy and public health concerns. Biosafety measures for the control of the biological risks in the isolation unit (Isolation Unit of the Veterinary teaching hospital). Implementation of therapeutical protocols against the most common infectious diseases of dogs and cats (Isolation Unit of the Veterinary teaching hospital). Sampling of companion and food-producing animals for the diagnosis of infectious diseases. Implementation of hygienic measures and vaccination protocols against infectious diseases in kennels/shelters (MAPIA shelter), stables (horse stables) and farms (cattle farms).

U.O. Didattica e servizi agli studenti
Strada prov.le 62 per Casamassima, km. 3,00
70010 Valenzano (Bari) - Italy
Tel. (+39) 080 5443944-41-46 • fax (+39) 080 5443939
didattica.veterinaria@uniba.it

diseases") **Hours: 30**	Laboratory diagnosis of infectious diseases of companion and food-producing animals. Interpretation of serological assays.

Biosafety rules for the attendance of practical activities.	Access to laboratories, stables and isolation unit of the veterinary teaching hospital will be allowed only to students wearing protective clothing (disposable coats and gloves and, when required, also footwear) and that have read the biosafety manual.

Materail for the personal study	
Books and bibliography	Farina, F. Scatozza, Trattato di malattie infettive degli animali, Torino, UTET, 1998. Class notes; PDF presentations available in Google Drive and Microsoft Teams
Additional materials	The additional teaching material will be provided by teachers at the beginning of the course and will be available in the Microsoft Teams platform.

Work schedule			
Hours			
Total	Lectures	Hands on (Laboratory, working groups, seminars, field trips)	Individual study
175	*65*	*30*	*80*
ECTS			
7	*5*	*2*	*/*

Teaching strategy	The teaching activities will consist of lectures the twill be enhanced with active learning methods, such as problem solving, case studies and role play, in order to implement the knowledge and increase the learning ability. The complete teaching process will be implemented with the aim of iconic, verbal and graphic communication models, taking advantage of the available teaching resources and technologies. Self-learning activities will be also realized through audiovisual materials and footages that will be uploaded on Microsoft Teams, as well as by means of self-evaluation tests elaborated by the teachers. The number of academic lectures will be reduced during practical activities, which will attribute greater weight to problem solving and learning by doing in order to favor the acquisition of skills and competences. The practical activities will be performed in the fully equipped laboratories of the Section of Infectious Diseases, in the stables and in the Isolation Unit of the Department, as well as in kennels/shelters, horse stables and cattle farms. Small groups of students (maximum 8-10 students per group), supervised by the teachers and their collaborators, will participate to clinical visits and will take and analyze clinical samples, performing individually or in small groups the diagnostic procedures in the lab and discussing the results with the teachers and their collaborators. Each student will individually carry out the practical activities and discuss the results with the teacher and/or his collaborators

Expected learning outcomes	

U.O. Didattica e servizi agli studenti
Strada prov.le 62 per Casamassima, km. 3,00
70010 Valenzano (Bari) - Italy
Tel. (+39) 080 5443944-41-46 • fax (+39) 080 5443939
didattica.veterinaria@uniba.it

Knowledge and understanding ability	At the end of the course, the student will have knowledge and understanding ability related to: • The aetiology, pathogenesis, clinical signs, diagnosis and treatment of the common diseases and disorders that occur in the common animal species (DOC 2.5) • The principles of disease prevention and the promotion of health and welfare. (DOC 2.9). • Veterinary public health issues, e.g. epidemiology, transboundary epizootic diseases, zoonotic and food-borne diseases, emerging and re-emerging diseases, food hygiene and technology (DOC 2.10)
Applied knowledge and understanding ability	At the end of the course, the student will be able to: • Apply principles of bio-security correctly (DOC 1.28) • Collect, preserve and transport samples, select appropriate diagnostic tests, interpret and understand the limitations of the test results (DOC 1.21) • Recognise signs of possible notifiable, reportable and zoonotic diseases as well as abuse and take appropriate action, including notifying the relevant authorities (DOC 1.24) • Advise on, and implement, preventive and eradication programmes appropriate to the species and in line with accepted animal health, welfare and public health standards (DOC 1.36) • Communicate clearly and collaborate with referral and diagnostic services, including providing an appropriate history (DOC 1.22)
Soft skills	**Autonomy of judgment** • Be able to review and evaluate literature and presentations critically (DOC 1.8). • Be able to analyze with a critical approach the operating procedures of a process (diagnostic, preventive, therapeutic, etc.) • Be able to propose adequate solutions to problematic situations **Communication skills** • Work effectively as a member of a multi-disciplinary team in the delivery of services (DOC 1.6.) • Communicate effectively with clients, the public, professional colleagues and responsible authorities, using language appropriate to the audience concerned and in full respect of confidentiality and privacy (DOC 1.4) **Capacity of self-learning** • Demonstrate an ability of lifelong learning and a commitment to learning and professional development. This includes recording and reflecting on professional experience and taking measures to improve performance and competence (DOC 1.13)
Summary of the knowledge and competences that the integrated course concurs to let the students acquire (Day One Competences) as scheduled by EAEVE	***Knowledge:*** *2.9* *2.5* *2.10* ***Competences:*** *1.4* *1.6* *1.8* *1.13* *1.21* *1.22*

U.O. Didattica e servizi agli studenti
Strada prov.le 62 per Casamassima, km. 3,00
70010 Valenzano (Bari) - Italy
Tel. (+39) 080 5443944-41-46 • fax (+39) 080 5443939
didattica.veterinaria@uniba.it

	1.24 *1.28* *1.36*

Assessment and feedback	
Methods of assessment	The exam of the integrated course "Infectious diseases 1" allows the acquisition of 7 ECTS of those included in the study plan. The verification of results will be performed: ○ during the course by means of: i) flip teaching sessions during which the autonomy of judgement of the student and his/her ability to take advantage of the previously acquired knowledge will be evaluated; ii) a written exam in itinere, at the discretion of the student, consisting of a multiple-choice questionnaire on the lectures (with a single correct answer per each question). ○ at the end of the course by means a final oral examination, which will assess the acquisition of the skills detailed in the teaching course's objectives. The exam will be passed after the correct discussion of two topics of the teaching programme.
Evaluation criteria	• *Knowledge and understanding ability:* **(grade from da 1 to 8)** o Students are expected to organize the knowledge of the basic and fundamental concepts of the program course • *Applied knowledge and understanding ability:* **(grade from da 1 to 8)** ○ Ability to make connections between different teachings and use appropriate examples ○ Ability to evaluate a clinical picture and elaborate a diagnostic algorithm ○ Ability to critically evaluate different control strategies and vaccine prophylaxis • *Autonomy of judgment* **: (grade from da 1 to 8)** ○ Analytical skills and critical sense with respect to the studied topics ○ Ability to express a comprehensive and uniform evaluation of the most common clinical and epidemiological features of food-producing and companion animals • *Communication skills* **(grade from da 1 to 8)** ○ Ability and clarity of speech ○ Appropriateness of expression, with particular regards to the specialised terminology • *Capacity to continue learning* **(: (grade from da 1 to 8)** ○ Ability to analyse scientific and technical documents to get information for professional updating and in-depth learning
Criteria for assessment and attribution of the final mark	The outcome of the partial examinations of "Viral Diseases" and "Prophylaxis of infectious diseases" will contribute to the determination of the final marks of the teaching module "Infectious Diseases 1 The final mark is the result of a collegial evaluation of the two partial examinations, during which the student must demonstrate to have acquired critical sense with respect to the topics of the course. The final assessment, expressed in thirties, will be passed with marks equal or greater than 18 and will be made on the basis of the correctness of the answer, the communication skills, the clarity of the presentation, the disciplinary competence, and the level of detail.

U.O. Didattica e servizi agli studenti
Strada prov.le 62 per Casamassima, km. 3,00
70010 Valenzano (Bari) - Italy
Tel. (+39) 080 5443944-41-46 • fax (+39) 080 5443939
didattica.veterinaria@uniba.it

Other comments	

U.O. Didattica e servizi agli studenti
Strada prov.le 62 per Casamassima, km. 3,00
70010 Valenzano (Bari) - Italy
Tel. (+39) 080 5443944-41-46 • fax (+39) 080 5443939
didattica.veterinaria@uniba.it