



UNIVERSITÀ  
DEGLI STUDI  
FIRENZE

**NEUROFARBA**  
DIPARTIMENTO DI NEUROSCIENZE,  
PSICOLOGIA, AREA DEL FARMACO  
E SALUTE DEL BAMBINO



**Associazione "Lapo" ONLUS**

Associazione Italiana Famiglie, Enti e Professioni  
contro le Malattie Neurologiche e Psichiatriche dell'Età Evolutiva

## **THEORETICAL/PRACTICAL COURSE**

**IN EQUINE-ASSISTED INTERVENTION (EAI):**

**THERAPEUTIC RIDING (TR)**

**Year 2020**

**XX<sup>th</sup> Edition**

# **PROGRAMME**

Note:

TR= Therapeutic Riding

EAAT= Equine-Assisted Activities and Therapies

EAI = Equine-Assisted Intervention,

EFI= Equine Facilitated Intervention

TR, EAAT, EAI, EFI have an equivalent meaning.

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AAI= ANIMAL ASSISTED INTERVENTION is a goal oriented and structured intervention that intentionally includes or incorporates animals in health, education and human service (e.g., social work) for the purpose of therapeutic gains in humans. **It incorporate** human-animal teams in formal human service such as Animal Assisted Therapy (AAT), Animal Assisted Education (AAE) or under certain conditions Animal Assisted Activity (AAA)». IAHAIO White Paper 2014, updated for 2018.

## **ANIMAL ASSISTED INTERVENTION** according to National Guidelines in AAI

**Aim:** to know the principles of AAI, their main disciplines, the animal species involved, the areas of intervention, the basis of human-animal relationship, bioethical principles, animal welfare, the role of the multidisciplinary team, planning of the intervention

### **Programme**

History of Animal-Assisted Interventions (AAI) and definition of AAT, AAE; AAA

Guidelines: national and international legislative framework also relating to Animal welfare protection

Animal species committed in AAI, their needs and ethological characteristics

Fundamentals and characteristic of the human-animal relationship

Intraspecific and Interspecific Communication, in particular with the horse

Ethic of the human-animal relationship. The animal welfare in AAI

Health Protocols of the animal used in AAI

Roles and responsibilities of the Professionals and Operators involved in the multidisciplinary Team

Multidisciplinary Team and AAI: contribution of the different animal species as a partner of the Help Relationship, roles and cooperation criteria between the Person in Charge, the multidisciplinary team and the team animal handler- animal

AAI according to the bio-psycho-social model

AAI and their specific areas of interventions

AAI planning, in particular with the horse

Planning of an educational intervention and protocol of intervention in the educational area

Planning of a therapeutic individualised project and practical-theoretical classification of the users

Monitoring tools of the sessions and evaluation of the user in AAT/AAE

Evaluation of the AAT/AAE effectiveness

International Classification of Functioning, Disability and Health (ICF) for the assessment of the results

Animal behavioural evaluation: techniques and methodological problems

Neurophysiological and neuro-psychological basics in AAT, in particular in TR

## **NEUROPSYCHIATRY**

### **a) NEUROLOGY, in particular Child Neurology**

**Aim :** to know the basic of anatomophysiology of the Nervous System; to know the postural and motor patterns, involuntary movements, balance impairment in Neuromotor Disorders (spasticity, dystonia, ataxia); to know the difference between motor delay and motor dysfunction; to know the main types of non-progressive and progressive Neuromotor Disorders (post-traumatic, Degenerative Disorders, etc).

### **Programme**

Notes of Anatomophysiology of the Nervous System  
Neuromotor disorders with particular regard to Childhood: analysis of pathological postural and motor patterns, involuntary movements, balance disorders  
Spasticity, dystonia, ataxia  
Developmental motor delay and clumsiness  
Cerebral Palsy  
Malformations and Genetic Disorders  
Neurological progressive diseases  
Neuromuscular Diseases  
Epilepsy  
First aid

### **b) NEUROPSYCHOLOGY AND PSYCHOPATHOLOGY**

***Aim:** To know the characteristics of Intellectual Disability, NLD, SLI, Psychiatric disorders in particular of childhood and adolescence, Borderline Disorders.*

*To know the keys of interpretation of behaviour in the psychopathology of childhood and the basic principles for a correct reaction and action.*

*To know causes and behaviours of social differences and deviance.*

### **Programme**

Psychiatric disorders in childhood: Anxiety Disorders; ADHD, Autism Spectrum Disorders (ASD)  
Borderline Personality Disorders (BPD)  
Psychiatric disorders in Adult  
Intellectual Disability  
Non-verbal Learning Disorder (NLD) and Specific Language Impairment (SLI)  
Social Difficulties and Deviance

### **c) REHABILITATION**

***Aim:** to know the meanings of disability and handicap and their impact on the subject, parents, society.*

*To know the principles of rehabilitation in neurological and psychiatric disorders*

*To know how to set up a planning rehabilitation project; guidelines; observation techniques*

### **Programme**

Disability - handicap  
Principles of Rehabilitation  
Project of Rehabilitative Intervention  
Problems of parents of disabled subject

### **EAAT/TR**

***Aim:** to know the evolution of the definition TR or EAAT or ETI or EFI and their disciplines also including Sports for the Disabled with its disciplines.*

*To know the principles of treatment of the neuromotor disorders (spastic, dystonic, ataxic, mixed disorders), intellectual disability, NLD, SLI, psychiatric disorders, deviance, and social difficulties and the TR specific setting.*

*To know the different methodological approach and treatment; individual or group riding sessions; integrated activity; groundwork;*

*on horseback: mounting and dismounting techniques, planning, and methodology of managing the session, exercise criteria based on symptomatology.*

*To know the guiding principle in choosing the horse, horse tack, and aids.*

*To know the main method for monitoring and evaluation of EAAT outcomes; Video recordings techniques and editing, Assessment Scales.*

*To know general aspects as indications, contraindications, precautions; structures, equipment, aids, environmental adaptations; EAAT/TR Team: roles and responsibility of the various involved Professionals; organisation and management of an EAAT Centre, insurance, medical-legal, and management aspects; relationship with Organisations, Institutions.*

### **Programme**

Definition of EAI, EFI, EAAT, TR and their disciplines

Vaulting; therapeutic, interactive vaulting

Sport for the disabled

Notes on Para-driving, Para-endurance

### **THE SUBJECT AFFECTED BY NEUROMOTOR DISORDERS ON HORSEBACK**

General principles

TR treatment setting in spasticity, dystonia, ataxia and in mixed disorders

TR treatment setting in neuromuscular disorders

TR treatment setting in dyspraxia, in clumsiness

Epilepsy and EAAT/TR

Clinical cases

Analysis and discussions of Videorecordings

### **THE SUBJECT AFFECTED BY MENTAL DISORDERS ON HORSEBACK**

General principles of the EAAT/TR treatment in Mental Disorders

TR treatment setting in subjects affected by Intellectual Disability, ADHD, Autism Spectrum Disorders, Borderline Personality Disorders

TR treatment setting in subjects who live in residential facilities

Clinical cases

Analysis and discussions of Videorecordings

### **EAAT/TR METHODOLOGY**

General aspects

Planning and management of the session

Mounting and dismounting methods; sitting backward technique; backriding technique

Exercises: criteria and application procedure based on the symptomatology

The horse's tack

Aids

Individual and group riding lessons

Integrated activity

Application of the EAAT/TR methodology to neuromotor disorders

Application of the physiotherapeutic principles to TR, particularly to Hippotherapy

Approaching, methods of mounting, conducting TR lesson, dismounting in spastic, dystonic, ataxic, mixed disorders and neuromuscular disorders

Choosing the horse's tack according to the symptomatology and the target

Application of the EAAT/TR methodology to mental disorders

Approaching, methods of mounting, conducting TR lesson, dismounting in mental disorders

Choosing the horse's tack according to the symptomatology and the target

EAAT/TR methodology in multiple disabilities

Groundwork

### **MONITORING AND EVALUATION OF EAAT/TR OUTCOMES**

Scheduled discussions of the Team

Modality and monitoring tools of the sessions

EAAT/TR assessment criteria in mental disorders

EAAT/TR assessment criteria in neuromotor disorders

Presentation and evaluation of subjects

## **VIDEORECORDINGS TECHNIQUES and EDITING ASSESSMENT SCALES**

General criteria for the evaluation of EAAT/TR outcomes

**“TR Neuromotor Disorders Assessment Scale”**

Clinical cases

Exercises in the Assessment Scale application

## **CONTEXT**

EAAT/TR in the rehabilitative project

EAAT/TR as an integration modality for the subject with handicap

EAAT/TR as a socio-educational resource in Social Difficulties

Institutionalisation and EAAT/TR

Rehabilitation Services and EAAT/TR

## **GENERAL ASPECTS**

EAAT/TR indications, contraindications, precautions

Structures, equipment, aids, environmental adaptations

EAAT/TR Team: roles and responsibility of the involved Professionals

Role and functions of the Medical Specialist of the EAAT/TR Centre (Project Manager)

Role and functions of the Veterinary in the AAI projects and specifically in an EAAT/TR Centre

Role of the Horse Handler and his position in the AAI setting

The role of the Riding Instructor in the EAAT/TR setting

Volunteers

National and regional legislation in social and health field

EAAT/TR: insurance, medical-legal and management aspects

Organisation and management of an EAAT/TR Centre

Management regulations of an EAAT/TR Centre and an Equestrian Centre with EAAT/TR activity

## **VETERINARIAN, HORSE MANAGEMENT, RIDING**

*Aim: Horse/Human Interaction. Horse management. Basic concepts of biomechanics and biodynamics of the horse. Gaits; horse's tack. Seat-Position-Aids. Techniques of riding*

### **Programme**

Horse's evolution and behaviour

Ethological and physiological needs

Horse's social and communication system

Intraspecific and Interspecific communication, in particular with the horse

Couple horse handler-horse

Safety procedures in the activity with the horse and work practice (groundwork and on horseback)

Management of horse

Management of stable

Needs of the horses involved in EAAT/TR programme

Prevention of behavioural disturbances; detection of signs of discomfort

Basic training and work out of the horse involved in EAAT/TR

Training of the unriden horse

Gaits and biomechanics of the horse and EAAT/TR

Horse's tack – Bridles – Bits

Seat – Position – Aids

Riding techniques. General principles of flatwork

Interaction between horse and rider in a normal and in a disabled subject

Practice of observation techniques on the horse's behaviour and the horse-rider combination