# Study of Posture, and Preventive and Compensatory Motor Activity

## Prof. Benedetto Toso

***COURSE AIMS***

Students will study the theory and learn technical and practical skills in order to plan and implement:

– courses of preventive, compensatory and re-educational gymnastics for back problems;

* Back School, Neck School and Bone School courses for vertebral pain.

***COURSE CONTENT***

*To examine posture and evaluate spinal function* and information from X-ray examinations in order to formulate an individual work plan.

*Preventive, compensatory and re-educational gymnastic exercises*:

– Respiratory training exercises.

– Postural training exercises.

– Mobility exercises for the spinal column.

– Exercises and postures for muscular stretching.

– Exercises for decompressing intervertebral discs.

– Exercises to strengthen and stabilise the spinal column.

– Balance and proprioception exercises.

*Specific work programmes for vertebral pain and problems at the development age.*

– Scoliosis, Lumbar hyperlordosis, Dorsal hyperkyphosis, Scheuermann’s Disease.

– Back School in the state school system.

*Specific work programmes for vertebral pain and problems in adults*

– Back School: for the prevention and treatment of backache.

– The cardinal points of the modern Back School.

 \* Information: anatomy and physiology of the spinal column, the causes of vertebral pain.

 \* Preventive, compensatory and re-educational gymnastics.

 \* Correct use of the spinal column: the ergonomics of posture and movements.

 \* Relaxation techniques.

 \* Life styles and attitudes to motor activities.

– Adapting the Back School according to the various problems of the spinal column: *lombosciatica of the hip from a hernia or bulging disc, spondylolisthesis, scoliosis pain in the adult, ankylosing spondylarthritis*.

– *Neck School: for the prevention and treatment of cervical pain.*

– Adapting the Neck School to the after-effects of *cervical whiplash*.

*Specific work programmes for vertebral pain and problems in the elderly.*

– Spondyloarthrosis, Stenosis of the spinal canal.

– Bone School: for prevention of osteoporosis.

– Adapting the Bone School to the after-effects of vertebral fracture.

Specific work programmes for defects and problems of the lower limbs and the temporomandibular articulation.

***READING LIST***

B. Toso, *Back School,* *Neck School*, *Bone School: programmazione, organizzazione, conduzione e verifica,* Edi Ermes, Milan, 2003.

B. Toso, *Back School, Neck School, Bone School: programmi di lavoro specifici per le patologie del rachide*, Edi Ermes, Milan, 2003.

S. Pivetta-M. Pivetta, *Tecnica della Ginnastica Medica,* *Scoliosi*, Edi Ermes, Milan, 2002.

A. Calza-M. Tognolo, *Il trattamento chinesiologico del dorso curvo,* ed. PPS, Villaverla (VI), 1999.

Updating monographs from the Scoliosis and Vertebral Pathologies Study Group:

S. Negrini-Ortolani-C. Gandolini-C. Trevisan, *L’attività fisica nella prevenzione dell’osteoporosi,* 1993.

S. Negrini, *La cinesiterapia nel trattamento delle lombalgie,* vol. I, 1994, vol. II, 1995.

S. Negrini-P. Sibilla, *La valutazione del paziente scoliotico,* 1997.

S. Negrini, *L’ipercifosi e le patologie del rachide dorsale,* 2003.

***TEACHING METHOD***

Theory lectures in the lecture room, practical additional classes in the gymnasium.

***ASSESSMENT METHOD***

Written and oral exam and practical demonstration of learnt skills.

***NOTES***

Further information can be found on the lecturer's webpage at http://docenti.unicatt.it/web/searchByName.do?language=ENG or on the Faculty notice board.