Name of Curriculum Curriculum: Sensory Integration Basic Course A complementary course

Target group	Occupational therapy students, occupational therapists
Learning outcomes	The aim of this course is to enable the participant to understand the current neuroscience, and the relevant and emergent theories, concepts, and practices, related to Ayres' Sensory Integration. The participant will be able to relate sensory processing to the underlying neurology and evidence base of sensory integration. This course will provide the participant with the neuroscience foundation that will enhance the participant clinical reasoning skills and enable the participant to draw on knowledge of sensory systems and Sensory Integration theory and research to support the participant's clinical observations and interventions. By the end of the course, the participant will have the necessary foundation knowledge of neuroscience, the theory of Ayres' Sensory Integration (ASI), definition and types of sensory integrative dysfunctions, principles of assessment and assessment tools to allow the participant to identify behaviours and challenges that are likely to have a sensory underpinning. Once the participant has completed and passed the course, the participant will be able to recognize sensory system involvement and advise around the impact on the person's participation in life. However, the participant will not be able to give a formal diagnosis of sensory processing and integration difficulties. A fully-qualified Sensory Integration Practitioner's judgement would be considered essential to confirm or negate the participant's hypotheses and should be sought through mentoring or supervision, in line with best practice. In summary after the course the participants will be able to: • Define scientific theory and frame of reference • Describe the neurological structures and their functions involved in the process of Sensory Integration • Describe the common patterns of sensory integration and the neural correlations • Relate the neurological foundation of sensory integration to typical childhood development, behaviour and learning • Identify prioritised research areas in sensory integration • Evaluate and refle
Study goal	To acquire the initial knowledge and skills about sensory integration theory, neuroscience, assessment and intervention.

Head of the Curriculum	Grete Anton grete.anton@ttk.ee
Main lecturers qualifications and work experiences	 Grete Anton, BA, OTR/L Bachelor in Occupational therapy at Tallinn Health Care College (2017) Private practitioner Lecturer for Tallinn Health Care College Hanna-Maria Põldma, MA, OTR/L
	 Working as an occupational therapy curriculum leader and as an occupational therapy lecturer at Tallinn Health Care College Professional experience as an occupational therapist and clinical placement mentor
	 Julie Wolf Broge, MSc BA Psychology, Bucknell University Occupational Therapy, Registered, Columbia University Speciality in pediatric OT and Sensory Integration Private practitioner and contracting lecturer for the Occupational Therapy School University College Copenhagen Betina Ada Rasmussen, PD, MPH Bachelor in occupational therapy at University College Copenhagen (1989) PD in educational psychology at UCC Copenhagen Master's Degree MPH, at Roskilde University (RUC) Speciality in pediatric OT, Sensory Integration and in treating children with congenital or acquired neurological injuries Employed at University College Copenhagen as an associated professor
	 Helena Tigerstedt, MSc, OTR Senior lecturer in the Occupational therapy degree programme at Turku university of applied sciences Responsible for planning the sensory integration curriculum and teaching the Sensory Integration Theory and Therapy postgraduate course Background in peadiatric occupational therapy and a Master in Healthcare Further specialization in theory and therapy of sensory integration by the University of Southern California

	 Hanna Huhtala, OTR Private practitioner Visiting teacher in the Bachelor's degree programme at Turku University of Applied Science Postgraduate specialization in Sensory Integration theory and therapy Vice-president of the Sensory Integration Therapy Association of Finland Marie Holmlund
	 Bachelor in occupational therapy at University of Gothenburg (1998) Further specialization in theory and therapy of sensory integration by the University of Southern California Private practitioner part time Paediatric occupational therapist within the school system in Varberg, Sweden Master's degree in Medical Science/Occupational therapy finished in 2020 at Lund University
Conditionsforstartingthestudies	Occupational therapy students from 2nd year spring semester or post- graduate occupational therapists
Minimum number of participants	20
Maximum number of participants	45
Volume of curriculum	9 ECTS: 120 h (3 weeks); 24 h (3 days) field work; 90 h independent work

Learning	Module 1
Content	First contact learning week:
	Introduction to module 1
	- Sensory Integration frame of reference
	- Brief history of Sensory Integration theory and therapy
	- Main postulates of SI theory and therapy
	- Core principle/concepts of Sensory Integration
	Neuroscience - the neurological foundation of sensory integration
	- Anatomy and function of the nervous system.
	- Sensory systems
	- Brain development from embryo to mature brain including
	neuroplasticity
	- Group work about different parts of the brain + discussion on
	behaviour
	Sensory integration and typical development
	- Sensory systems related to key elements of childhood
	development
	- How the sensory systems influence childhood development
	- Sensory integration and typical development (modulation &
	discrimination)
	- Self- evaluation
	Feedback from participants
	Module 2
	Second contact learning week
	Introduction to the module 2
	Definition and types of sensory integration dysfunction:
	- Modulation
	- Discrimination and perception
	- Postural dysfunction
	- Bilateral integration and sequencing
	- Somatodyspraxia
	Introduction to assessments and Data-Driven Decision-making
	Principles of assessment and assessment tools:
	- Clinical observation
	- Sensory Profile 2 + AASP
	- SPM
	- VMI
	- IVPS 4

	 Module 3 Third contact learning week: Introduction to module 3 Introduction to Journal club Critical review of articles Data-Driven Decision making and proximal and distal goal setting Goal setting GAS Core principles of sensory integration intervention Fidelity principles of sensory integration Practical exercise: embodied experience of sensory integration Learning to use tools for sensory integration intervention Planning sensory integration Self-regulation and strategies Novel environments for intervention
Study methods and environment	 Contact lessons in the form of seminars, simulation, role-plays, group work etc. Field work. Independent work (e-learning, reading literature; analysing cases; assembling portfolio with study progress reflections, and written tasks).
Literature	 Bundy, A. C., Lane, S.J., Murray, E. A. (2002). Sensory integration: Theory and Practice. 2nd Edition. Philadelphia: F. A. Davis Company. Bundy, A. C., Lane, S.J. (2019). Sensory Integration : Theory and Practice. 3rd Edition. Philadelphia: F. A. Davis Company. A list with scientific articles provided by lecturers.
The conditions for completion of the course	 Assessment of learning outcomes (non-graded): Define scientific SI theory and frame of reference Describe the neurological structures and their functions involved in the process of Sensory Integration Passed: Has an overview of neuroscience, sensory integration theory, history and therapy process, including sensory integration assessments, therapy goal setting, therapy planning, and intervention. Gets at least 51% of the score in final test. Describe the common patterns of sensory integration and the neural correlations Relate the neurological foundation of sensory integration to typical childhood development, behaviour and learning Passed: Demonstrates independent carrying out clinical observations in field work. Presents a client case report of one chosen client.

	- Identify prioritised research areas in sensory integration. Passed: Presents a group work with scientific articles after second contact learning week.
	- Evaluate and reflect students' learning Passed: Uploads an individual written portfolio in the end of the course with collected learning materials, reflections on study progress, and independent work tasks to the teachers.
	Attends 80% in contact lessons.
Documentation	Certificate
Study activities	 Prerequisit: Students reads a chapter about neuroscience from "Sensory Integration" by F.A. Davis before the course start date. Field work after first contact learning week. Skype discussions between international students. Clinical observations in their own field on two clients. Group work with scientific articles Student uploads an individual portfolio in the end of the course with collected learning materials, reflections on study progress, and independent work tasks to the teachers.
Responsible lecturer of course	Grete Anton grete.anton@ttk.ee
Lecturer	Hanna-Maria Põldma hannamaria.poldma@ttk.ee
Lecturer	Helena Tigerstedt Helena.Tigerstedt@turkuamk.fi
Lecturer	Hanna Huhtala: <u>hanna.huhtala@turkuamk.fi</u>
Lecturer	Julie Wolf Broge info@sensations.dk
Lecturer	Betina Ada Rasmussen BTRA@kp.dk
Lecturer	Marie Holmlund marie.sensit@gmail.com