Course Title/Code:	**Neurocognitive Dysfunctions in Psychosis (MMPH6194)**
Department:	Psychiatry
Objective:	Neurocognitive dysfunctions are a core feature of psychotic disorders. Understanding their relationships to symptoms and outcome is vital for practitioners. This module explores the nature of cognitive impairments in psychosis, including long-term memory, working memory, semantic memory, selective attention, sustained attention, and executive function. Clinical implications of these impairments will be discussed. Explanatory neurocognitive accounts for specific psychotic symptoms will be reviewed (e.g., inner speech and auditory hallucinations, internal monitoring and passivity, probabilistic reasoning and delusions). Participants will be guided through the methodological issues in studying and assessing neurocognition (e.g., double dissociation, learning effects), with demonstrations of some common assessment techniques.

Content:

Cognitive dysfunctions in psychosis
- Studying cognitive functions
- Methodological issues
- Conceptual assumptions: module, content-independent
- Relationship with functional outcome
- "Cognitive remediation"

Executive functions, attention & general intelligence in Psychosis
- General intelligence impairment
- Cognitive flexibility
- Processing speed

Language and memory dysfunctions in psychosis
- Long-term memory
- Working memory
- Semantic memory, categorization
- Metamemory
- Time perception and prospective memory

Neurocognitive models in psychosis
- Reward and salience

Social cognitive dysfunctions & Subjective cognitive impairments in psychosis
- Theory of mindSelf-concept
- Measurement, structure
- Relationship with objective measures
- Importance of subjective cognitive dysfunction

Cognitive theories for psychotic symptoms

Assessment and interpretation of neurocognitive functions

Learning outcomes: On completion of the course, the students are expected to:

- be familiar with the current understanding of the neurobiological models of psychosis
- acquire basic knowledge about neuroanatomy and functional neuroanatomy, particularly with reference to psychosis
- acquire basic knowledge about different neurotransmitters, their actions and roles, with particular emphasize on the role and action of dopaminergic system and its relationship with symptoms of psychosis
- understand the neurodevelopmental theory of psychosis such as pruning and lateralization
- understand stress-vulnerability models and the evidence associate with this
- be aware the dysfunctional associative learning model and its evidence
- understand the principle of information processing failure and its relationship with psychosis
- be familiar with the current evidence of the neurobiological basis of psychosis from different investigative modalities

Prerequisite: None

Duration: 1 semester; 2.5 hours/week; 24 contact hours

Assessment   Continuous assessment (40%)
Written examinations (60%)

Remarks: Priority will be given to research postgraduate students those research projects is on a psychosis-related topic.