



TEL AVIV UNIVERSITY
INVITES YOU TO
**A UNIQUE ONLINE
LEARNING EXPERIENCE!**



THE WONDER OF SCIENCE:
NEUROBIOLOGY – SCIENCE OF THE BRAIN

What occurs in our brains when we see, or when we think, and even when we are feeling all sorts of feelings? How does our brain keep memories for days or even weeks, and why do we forget? Through our course, we will drive into the depths of our nervous system and learn how the activity of simple cells allow us to create a sense of the world around us. We will examine what our brain does while we are asleep and why it is necessary. Finally, we will explore what happens to the brain during a stroke, traumatic injury, and Alzheimer's and ask how we can assist to its recovery.

The courses are open for middle school students at age of 12–16, at school years of Form 1 to 4.

The courses will take place for 1.5 hours via zoom from 4:00-5:30pm HKT on the following dates:

Sunday	12/03
Monday	13/03
Tuesday	14/03
Wednesday	15/03
Thursday	16/03

Total teaching hours: 7.5

Participation fee: HKD \$3,200 per student

Students who complete the course will receive a certificate from Tel Aviv University

For more information and to register please contact: Mr Elvis CHU, Programme Director, Inspire Education Association |Tel: +852 9826 1852 |Email: elvis.chu@inspire-education.org OR Mrs Michal Shtorch, CEO, HK Friends of Tel Aviv University Ltd. |Tel: +852 9172 6714|Email: michalms@tauex.tau.ac.il

Collaborative Organisation:

COURSE SYLLABUS:



THE WONDER OF SCIENCE: NEUROBIOLOGY – SCIENCE OF THE BRAIN

DAY 1: DEBUNKING THE BRAIN

Do we really use only 10% of our brain? Does having a bigger brain make you smarter? What is the difference between the right and left hemispheres of the brain? Most of us heard many “facts” about the brain, but not all are true. We’ll discuss famous myths about the brain and try to understand what science has to say.

DAY 2: SEEING IN YOUR MIND’S EYE

While eyes are the first step in seeing the world, much of our visual perception occurs in our brains. In this lesson, we’ll follow the pathway of seeing from the image, the eye, and the brain. We’ll ask why some people don’t see color and learn about patients who see perfectly fine but cannot recognize their mother’s face.

DAY 3: THE REMEMBERING BRAIN

How does our brain create new memories? And where in the brain do memories reside? By examining cases of patients with memory loss, we will learn about the brain’s memory system. We will see what happens when we remember and discuss why our memory is not always as reliable as we would like.

DAY 4: THE SCIENCE OF SLEEP

We spend much of our time sleeping, laying around, and seemingly doing nothing. What happens to our brains when we sleep? And why do we even have to sleep when we want to spend our time on more exciting things. In this lesson, we will learn about the brain’s activity during sleep, try to understand why we dream, and glimpse into what happens when we don’t sleep enough.

DAY 5: THE SICK BRAIN

In our daily life, we take our ability to think, remember, see and feel for granted. However, many diseases threaten these simple functions. In this lesson, we will talk about different illnesses that can affect the brain and learn about current and future treatments for Alzheimer’s, stroke, and other brain disorders.