Course title | Principle and Methodology in Brain Science  
---|---  
Term |前期 1st Half  
Credit(s) | 1  
The main day |  
The main period |  
School/Program | School of Life Science  
Department/Program | Common Subjects of Life Science  
Category | Common  
Lecturers | Mitsuhiro Tateyama, Akiyuki Nishimura, and others  

Instructor

| Full name | NAMBU ATSUSHI  

Outline | This subject focuses on experimental approaches in brain science. 13 methodologies frequently used in brain science will be introduced to cultivate critical views on scientific data.  


Grading system | 01:Four-grade evaluation (A, B, C, D)  

Grading policy | Students must attend at least half of the lectures to get credit. It is also required to write a short paper on a topic related to one of the lectures. The paper will be graded by the lecturer, and it will be used to determine pass/fail.  

Lecture Plan | Schedule: May 20 – July 8 10:00-11:00, 11:00-12:00 on Thursdays  
May 20 Molecular physiological methods (Michuhiro Tateyama)  
May 20 Methods for cardio-vascular functions (Akiyuki Nishimura)  
May 27 Molecular biological and biochemical methods 1 (Yuko Fukata)  
May 27 Molecular biological and biochemical methods 2 (Kenta Kobayashi)  
Jun 3 Electrophysiological methods 1 (Madoka Narushima)  
Jun 3 Electrophysiological methods 2 (Saeka Tomatsu)  
Jun 10 Optical microscopy 1 (Hideji Murakoshi)  
Jun 10 Optical microscopy 2 (Ryosuke Enoki)  
Jun 17 Methodology in genome science (Yasuhiro Go)
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
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<tbody>
<tr>
<td>Jun 17</td>
<td>Methods for mammalian transgenesis (Masumi Hirabayashi)</td>
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<tr>
<td>Jun 24</td>
<td>Morphological methods (Yoshiyuki Kubota)</td>
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<tr>
<td>Jun 24</td>
<td>Cell biological methods (Yasushi Izumi)</td>
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<td>Jul 1</td>
<td>Optical methods to read and manipulate neural circuits (Masakazu Agetsuma)</td>
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<tr>
<td>Jul 1</td>
<td>Behavioral methods (Kenichiro Nakajima)</td>
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<td>Jul 8</td>
<td>Methods for sensory biology (Takaaki Sokabe)</td>
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<td>Jul 8</td>
<td>In vivo imaging of the human brain (Masaki Fukunaga)</td>
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**Location**  
Zoom online

**Language**  
Japanese

**Textbooks and references**  

**Related URL**  
http://sbs.jp.nips.ac.jp/schedule/

**Explanatory note on above URL**  
Please keep be updated on the latest schedule from “Schedule of the classes” on the program website.

**Others**  
Pre-requisites: No particular background knowledge is required.

**Keyword**  
SOKENDAI Integrative Brain Science Course