Studies Plan

EDNE - Neuroscience 2022-23

Core courses

Courses				Exam	Credit
Language	*Code*	*Section*	*Teacher*		
Advanced topics in network neuroscience *(Next time: Fall 2022)*					
E	*EE-619*	*EDEE*	*Amico*	*Written*	*2*
Data Science applications in Neuroimaging *(Postopned to spring 2023)*					
E	*BIO-641*	*EDNE*	*Dayan*	*Written*	*2*
Introduction to Applied Data Science (I2ADS) *(Fall 2022)*					
E	*BIO-645*	*EDNE*	*Dayan*	*Written*	*2*
Lecture series on scientific machine learning *(Next time: Fall)*					
E	*PHYS-754*	*EDPY*	*Carleo Ceriotti De Los Rios Mathis Schwaller Wyart Zdeborová*	*Oral presentation*	*2*
Mathematical methods for neuroscience					
E	*BIO-612*	*EDNE*	*Kanari*	*Project report*	*3*
Planning your scientific journey *(Zoom meeting times will be determined according to the professor and participants availabilities.)*					
E	*BIO-652*	*EDNE*	*Ramdya*	*Written & Oral*	*1*
State of the Art Topics in Neuroscience X *(February 2023)*					
E	*BIO-693(10)*	*EDNE*	*Gräff Invited lecturers Sandi Perez*	*Written*	*1*
State of the Art Topics in Neuroscience XIII					
E	*BIO-642*	*EDNE*	*Gerstner*	*Term paper*	*1*
Symmetry and Conservation in the Cell *(Next time: Spring 2023)*					
E	*BIO-692*	*EDNE*	*Shillcock*	*Multiple*	*3*
Training Rotation (EDNE) *(All year long -Training rotations must be approved by the supervisor, by the host laboratory, as well as by the doctoral program director)*					
E	*BIO-699(n)*	*EDNE*	*Profs divers*	*Project report*	*1*

Other doctoral courses (EDOC)

Courses				Exam	Credit
Language	*Code*	*Section*	*Teacher*		
Advanced biomedical imaging methods and instrumentation *(Next time: Fall)*					
E	*PHYS-719*	*EDPY*	*Mishkovsky*	*Term paper*	*4*
Advanced Microscopy for Life Science *(Every year in September. To register, contact EDMS Administration)*					
E	*BIO-659*	*EDMS*	*Seitz*	*Oral presentation*	*3*
Basic principles of drug action at the nervous system *(Next time: Spring 2023)*					
E	*CH-603*	*EDCH*	*Invited lecturers Kellenberger*	*Written*	*1*
Optimization and simulation *(Next time: Spring 2023)*					
E	*MATH-600*	*EDCE*	*Bierlaire*	*Multiple*	*4*
Responsible Conduct in Biomedical Research (Fall)					

(Next time: Fall 2022)					
E	*BIO-664(A)*	*EDBB*	*Glusker*	*Oral*	*1*
Responsible Conduct in Biomedical Research (Spring)					
(Next time: Spring 2023)					
E	*BIO-664(B)*	*EDBB*	*Glusker*	*Multiple*	*1*
Scientific writing for biomedical articles (Fall)					
(Next time: Fall 2022)					
E	*BIO-686(A)*	*EDBB*	*Bless* *Le Duc*	*Project report*	*1*

Master courses

Courses				***Exam***	***Credit***
Language	*Code*	*Section*	*Teacher*		
Analysis and modelling of locomotion					
E	*BIOENG-404*	*SV*	*Aminian* *Courtine* *Ijspeert*	*During the semester*	*4*
Computational neurosciences : neuronal dynamics					
E	*NX-465*	*NX*	*Gerstner*	*Written*	*5*
Neuroscience: behavior and cognition					
E	*BIO-483*	*SV*	*Blanke* *Herzog* *Sandi* *Perez*	*Written*	*5*
Neuroscience: cellular and circuit mechanisms					
E	*BIO-482*	*SV*	*Crochet* *Petersen*	*During the semester*	*5*
Neuroscience: from molecular mechanisms to disease					
E	*BIO-480*	*SV*	*Gräff* *Lashuel* *Schneider*	*Written*	*5*
Understanding statistics and experimental design					
E	*BIO-449*	*SV*	*Herzog*	*Written*	*4*