

GGNB: Short Methods Courses & Method Seminars; Extended Methods Courses
Course program October 2019 - March 2020 (winter semester 2019/20)

- subject to change -

- Registration in Stud.IP possible two months before the course month -

Department/Group	Supervisor(s)	UniVZ	ID	Title of Course	Credits	Date
Biochemistry						
Rodnina, Marina	Mercier, Evan	340010	A 081	Introduction to transient kinetic methods	1.0	10-11 Oct 2019
Tittmann, Kai	Viktor Sautner, Fabian Rabe von Pappenheim	340018	A 064	Principles and methods of protein purification by chromatography	1.0	7-8 Oct 2019
Feußner, Ivo	Herrfurth, Cornelia	340045	A 016	Introduction to lipid analysis	1.0	9-11 Mar 2020
Tittmann, Kai	Sören Rindfleisch, Viktor Sautner	340077	A 071	Thermodynamic characterization of biomolecular interactions by isothermal titration calorimetry	1.0	17-18 Oct 2019
Rehling, Peter	Bettina Homberg, Sabine Poerschke	340211	A 163	Native membrane protein complex isolation	0.5	11 Nov 2019
Rehling, Peter	Ridhima Gomkale, Roya Yousefi	340212	A 164	<i>In vitro</i> import into purified mitochondria	1.0	17-18 Oct 2019
Urlaub, Henning	Fanni Laura Bazso, Sofia Ainatzi	340237	A 177	Sequence analysis of proteins and their post-translational modifications by electrospray ionization (ESI) mass spectrometry	1.0	28-30 Oct 2019
Ischebeck, Till	-	340243	A 198	Metabolite profiling (GC-MS)	1.0	2-3 Dec 2019
Jahn, Reinhard	Angel Perez-Lara, Sonja Pribicevic	340255	A 210	Study of membrane binding proteins involved in exocytosis	1.0	14-15 Nov 2019
Katschinski, Dörthe	Maithily Nanadikar	340340	A 234	Using biosensors to study cellular redox processes	0.5	<i>tba</i>
Molecular Biology & Genetics						
Jakobs, Stefan	Jensen, Nickels	340233	A 173	Strategies to design photoswitchable fluorescent proteins and their application in nanoscopy	1.0	22-23 Oct 2019
Cramer, Patrick	-	340316	A 214	Lecture Series "Genome Science I"	0.5	Nov 2019-Mar 2020
Outeiro, Tiago	Daniel Kaganovich, Triana Amen	340441	A 247	Generation of CRISPR/Cas9 knockout cell lines	1.0	15-16 Oct 2019

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Cell Biology & Microbiology, Imaging						
Mitkovski, Mišo	Mitkovski, Mišo / Georg Wieser	340066	A 098	Introduction to image processing in biology with ImageJ and FIJI	1.0	24-25 Oct 2019
Pöhlmann, Stefan	Michael Winkler, Markus Hoffmann, Heike Hofmann-Winkler	340221	A 171	Viral transduction systems	1.0	12-14 Nov 2019
Nave, Klaus-Armin	Möbius, Wiebke	340222	A 044	Subcellular localization of proteins by immunoelectron microscopy of cryosections	1.0	21-22 Oct 2019
Enderlein, Jörg, Tsukanov, Roman	Nazar Oleksiievets	340406	A244	Super-resolution microscopy with DNA-PAINT	1.0	15-16 Oct 2019
Pöhlmann, Stefan	Pöhlmann, Stefan	350052	A 160	Molecular Biology of HIV replication and pathogenesis	1.0	Wednesdays
Richter-Dennerlein, Ricarda	Lavdovskaia, Elena	340415	A 246	Investigating macromolecular complexes by density gradient centrifugation	1.0	7-8 Nov 2019
Enderlein, Jörg	Hongje, Jang	340454	A 255	Sample preparation and image analysis for 3D fluorescence microscopy of living cells	1.0	11-12 Feb 2020
Luther, Stefan	Raúl Quiñonez, Vineesh Kappadan	340326	A 226	Optical Mapping for Cardiomyocyte Cultures and Isolated Hearts	1.0	1-2 Oct 2019
Developmental Biology, Anatomy & Histology						
Stadelmann, Christine	Katja Schulz	340033	A 060	Non-radioactive <i>in situ</i> hybridization	1.0	Nov 19
Bucher, Gregor	-	340083	A 145	Orthologs and Paralogs – how they evolve and how to distinguish them	0.5	6 Dec 2019
Ebert, Antje	-	340320	A 219	Human induced pluripotent stem cells (iPSCs), their differentiation and genomic modification via CRISPR/Cas9	1.0	17-18 Mar 2020
Uhmann, Anja	Uhmann, Anja, Dominik Botermann	340321	A 217	Immunofluorescence staining of murine pituitary whole mounts	0.5	7-8 Nov 2019
Uhmann, Anja	Uhmann, Anja, Nadine Brandes	340323	A 218	Flow cytometric analysis of freshly isolated keratinocytes of adult mice	1.0	21-22 Nov 2019

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Vertebrate Animal Models						
Wirths, Oliver	-	340199	A 175	Neurodegenerative Diseases: Behavioral and neuropathological analysis of transgenic mouse models	1.0	Jan 2020
Bähr, Mathias	Lingor, Paul	340219	A 139	<i>In vitro</i> and <i>in vivo</i> models for Parkinson's disease research	0.5	27 Nov 2019
Molecular & Cellular Neuroscience, Electrophysiology						
Rhee, Jeong Seop	-	340038	A 096	Nerve cell culture and patch-clamp recordings from nerve cells	1.0	10-11 Oct 2019
Pardo, Luis	Walter Stühmer	340040	A 063	Patch clamp	1.0	23-25 Oct 2019
Wichmann, Carolin	Michalski, Susann	340196	A 149	Basic methods of transmission electron microscopy - from tissue preparation to 3D reconstruction	1.0	12-13 Nov 2019
Brose, Nils	Erinn Gideons	340236	A 153	Isolation of synaptic compartments for quantitative biochemical analysis	0.5	22 Nov 2019
Fiala, André	Annekathrin Widmann	340319	A 216	Neuronal circuit dissection in <i>Drosophila</i>	1.0	7-9 Oct 2019
Gärtner, Jutta	Susann Diegmann, Kolja Meier	340456	A 233	Next Generation Sequencing to identify the disease gene in unclear neurogenetic disorders	1.0	24-25 Mar 2020
Wojcik, Sonja	-	340379	A 201	Whole-cell patch-clamp recording of adrenal chromaffin cells	0.5	10 Jan 2020
Theoretical, Systems & Behavioral Neuroscience						
Geisel, Theo / Gollisch, Tim / Gütig, Robert/	Geisel, Theo / Gollisch, Tim / Gütig, Robert/ Wolf, Fred	530170	A 021	Theoretical and Computational Neuroscience: Collective Dynamics Biological Neural Networks I	2.0	Fridays
Structural Biology						
Bennati, Marina	Tomas Orlando, Markus Hiller	340055	A 003	EPR-Spectroscopy	1.5	22-24 Jan 2020
Stark, Holger	Niels Fischer	340378	A 225	Single particle cryo-EM of macromolecular complexes and cellular electron tomography	2.5	9-13 Dec 2019

Biophysics, Bioinformatics and Statistics						
Friede, Tim	Röver, Christian	340061	A 100	Basic statistics for graduate students in the life sciences	1.0	21, 22, 29 Oct and 5, 15 Nov 2019
Steinem, Claudia	Stefan Krüger, Kristina Kramer, Ingo Mey	340067	A 133	Using biosensors to study analyte-ligand interactions: basic principles and applications	0.5	13 Feb 2020
Grubmüller, Helmut / Schmidt, Christoph F.	Grubmüller, Helmut / Schmidt, Christoph F.	340166	A 025	Current Topics in Biophysics – Lecture Series	1.0	Fridays
Beißbarth, Tim / Maksims Fiosins / Posnien, Nico	Beißbarth, Tim / Maksims Fiosins / Posnien, Nico	340208	A 157	Next Generation Sequencing (NGS) – Analysis of RNAseq and ChIP-seq data	1.5	19-21 Nov 2019
Grubmüller, Helmut / de Groot, Bert	Grubmüller, Helmut / de Groot, Bert	340232	A 143	Theoretical and Computational Biophysics	2.0	Mondays
Steinem, Claudia	Andreas Janshoff / Ingo Mey/ Florian Mann	340235	A 169	Atomic Force Microscopy versatile tools to study surfaces and surface properties	0.5	12 Mar 2020
Hörandl, Elvira	Appelhans, Marc /Claudia Pätzold	340247	A 188	Introduction into the bioinformatic analysis of next generation sequence data	1.0	1,2,4 Oct 2019
Godec, Aljaz	Kristian Blom	340296	A 212	Advanced Methods in Statistical Mechanics	4.0	Wednesdays
Hörandl, Elvira	Appelhans, Marc /Claudia Pätzold	340300	A 190	Reduced-representation NGS methods in phylogenomics and biogeography: RADseq & RNAseq	1.5	7-9 Oct 2019
Nietert, Manuel	-	340317	A 215_1	An introduction to reproducible handling of scientific data and concordant analysis using KNIME workflows	0.5	14-15 Oct 2019
Grubmüller, Helmut / de Groot, Bert	Helmut Grubmüller, Bert de Groot, Malte Schöffner	340387	A 024	Introduction to Molecular Dynamic Simulations	1.0	March 2020
Nietert, Manuel	-	340389	A 215_2	An introduction to reproducible handling of scientific data and concordant analysis using KNIME workflows	0.5	<i>tba</i>
Beißbarth, Tim	Hryhorii Chereda, Manasa Kalya Purushothama	440727	A 176	Introduction to R and RNA-Seq analysis	1.0	16-18 Oct 2019
Jeschke, Markus	-	340422	A 250	Implementing open-source microcontrollers to customize your experiments – an introduction	1.5	11-13 Nov 2019
Maaß, Corinna / Karpitschka, Stefan	Hansol Jeon, Babak Vajdi Hokmabad	340013	A 253	Microfabrication techniques for Microfluidics	1.0	14-15 Oct 2019
Maaß, Corinna / Karpitschka, Stefan	Hansol Jeon, Babak Vajdi Hokmabad	340014	A 254	Flow measurement techniques in microfluidics	1.0	4-5 Nov 2019
Laura Turco, Hyejeong Kim	Laura Turco, Hyejeong Kim	340457	A 256	Microfabrication: Photolithography, Soft-lithography and Applications	1.0	6-7 Feb 2020
Stephens, Dwayne / Mettin, Robert	Stephens, Dwayne / Mettin, Robert	340439	A 251	Introduction to COMSOL	1.0	5-6 Dec 2019
Parlitz, Ulrich	-	534976	A 263	Julia zero-to-hero workshop	0.5	28 Feb 2020

Laboratory Animal Science:

Courses are offered by the UMG. To register for the Laboratory Animal Science courses, please contact Dr. Monique Silter (monique.silter@med.uni-goettingen.de). The fees for the course have to be covered by the department of the participant.

Theoretical part: online course. The passing of a written exam is prerequisite for participation in the practical part.

Practical part (Modules 1-6):

25-29 Nov 2019	23-27 Mar 2020	21-25 Sep 2020
10-14 Feb 2020	22-26 Jun 2020	23-27 Nov 2020