

Master Programme	Systems Biology and Metabolomics (English)		
Version: January 2018 Start in Summer 2018	Total 120 ECTS Red title modules are strongly suggested		
Modules Semester 1	Area	ECTS	CoH
<p>Neurobiology, Behavioural Physiology and Animal Ecology</p> <p>Lecture series; Tue 4-6 p.m. and Thu 4-5 p.m., Lecture hall A102; Online registration is required: orp from 1.Oct until 21.Dec.</p> <p>Examination: graded test; obligatory online registration under topic Systems Biology under module Neurobiology, Behavioural Physiology and Animal Ecology, orp from 1.Oct until 31.Jan; date and place of examination tba</p> <p>Contact: Prof. Christian Wegener christian.wegener@uni-wuerzburg.de</p>	Obligatory Topic: Systems Biology	10	3
<p>Topics in Systems Biology</p> <p>Lecture and Seminar; Thu 10 a.m. until 1 p.m. / Lecture room Bioinformatics; Online registration is required;</p> <p>Examination: graded test; obligatory online registration under topic Systems Biology under module Topics in Systems Biology, orp from 1.Oct until 31.Jan</p> <p>Contact: Eva-Maria Fischer eva.fischer@uni-wuerzburg.de</p>	Obligatory Topic: Systems Biology	10	3
<p>Systems Biology F1</p> <p>Practical course, 5 weeks; Information through Master WueCampus2 forum;</p> <p>Examination: graded Lab protocol and seminar talk; obligatory online registration under topic Systems Biology under module Systems Biology F1, orp from 1.Oct until 31.Jan; report delivery date in agreement with supervisor.</p> <p>Contact: Prof. Christian Wegener christian.wegener@uni-wuerzburg.de</p>	Obligatory/ Topic: Systems Biology	10	15
<p>Additional Achievements Winter</p> <p>See list</p>	Additional Achievements Winter		
ECTS after 1. Semester		30	

Modules Semester 2	Area	ECTS	CoH
<p>Molecular Biology</p> <p>Lecture series; 9-10 a.m. / Tue, We, Fr, / Lecture hall A102; Online registration is required: 1.April until 31. May</p> <p>Examination: graded test; obligatory online registration under topic Metabolomics under module Molecular Biology, orp from 1.April until 30.June; date and place of examination tba</p> <p>Contact: Eva-Maria Fischer eva.fischer@uni-wuerzburg.de</p>	<p>Obligatory/ Topic: Metabolomics</p>	10	3
<p>Topics in Bioinformatics</p> <p>Lecture and Seminar; Thu 11 a.m. until 1 p.m. / Lecture room Bioinformatics; Online registration is required;</p> <p>Examination: graded test; obligatory online registration under topic Metabolomics under module Topics in Bioinformatics, orp from 1.April until 30.June; date and place of examination tba</p> <p>Contact: Eva-Maria Fischer eva.fischer@uni-wuerzburg.de</p>	<p>Obligatory Topic: Metabolomics</p>	10	3
<p>Signals and Differentiation</p> <p>Lecture and seminar; Online registration is required via online ticket; Lecture Fr 10-11 a.m. Lecture hall A102; Seminar either Mo or Thu 5-6.30 p.m., Seminar-Room C102; Information through Master WueCampus2 forum. Contact: Prof. Ricardo Benavente benavente@biozentrum.uni-wuerzburg.de</p> <p>Examination: graded test; obligatory online registration under topic Metabolomics under module Cell and Developmental Biology 2, orp from 1.April until 30.June; date and place of examination tba</p>	<p>Obligatory/ Topic: Metabolomics</p>		
<p>Pharmaceutical Biology & Metabolomics F1</p> <p>Practical course on a current research project, 5 weeks;</p> <p>Examination: graded report; obligatory online registration under topic Metabolomics under module Pharmaceutical Biology & Metabolomics F1, orp from 1.Oct until 31.Jan; report delivery date in agreement with supervisor.</p> <p>Contact: Dr. Agnes Fekete agnes.fekete@uni-wuerzburg.de</p>	<p>Obligatory Topic: Metabolomics</p>	10	3
<p>Additional Achievements Summer</p> <p>See list</p>	<p>Additional Achievements Summer</p>		
ECTS after 2. Semester		30	

Modules Semester 3	Area	ECTS	CoH
<p>F2-Practical course in your thesis topic</p> <p>This practical course (10-12 week) is preparatory to the thesis and therefore its arrangement goes along with the organization of the thesis.</p> <p>Examination: passed report; obligatory online registration under chosen topic and either under the module Systems Biology F2 or under the module Pharmaceutical Biology & Metabolomics F2</p> <p>Contact Metabolomics: Dr. Agnes Fekete agnes.fekete@uni-wuerzburg.de</p> <p>Contact Systems Biology: Eva-Maria Fischer eva.fischer@uni-wuerzburg.de</p>	Obligatory/ Topic: Systems Biology or Metabolomics	15	30
<p>Additional Achievements Winter</p> <p>See list for suggestions</p>	Additional Achievements Winter	15	1-5
ECTS after 3. Semester		30	

Modules Semester 4	Area	ECTS	CoH
<p>Thesis</p> <p>Scientific project; Has to be preceded by a preparatory F2 practical course of 10-12 weeks. The written thesis is graded.</p> <p>You require two supervisors. One of the two supervisors has to be member of the Faculty of Biology.</p> <p>The thesis project (title) and thesis start date are registered through the examination office. For registration a form signed by both supervisors and by yourself has to be delivered to the examination office.</p> <p>Form in WueCampus2.</p>	Obligatory/ Topic: Systems Biology or Metabolomics	25	---
<p>Thesis Colloquium</p> <p>30 minutes talk about your thesis project followed by a 15 min discussion and questionnaire – graded.</p> <p>The colloquium is registered through the examination office. For registration, a form has to be delivered to the examination office.</p> <p>Form in WueCampus2.</p>	Obligatory/ Topic: Systems Biology or Metabolomics	5	---
ECTS after 4. Semester		30	

Additional Achievements Winter	Area	ECTS	CoH
<p>German language courses</p> <p>Various courses possible: See information under http://www.zfs.uni-wuerzburg.de/sprachen/deutsch_als_fremdsprache/aktuelles_und_kurstermine/</p> <p>Obligatory according to regulations. A prove of German language skill has to be delivered to the “Studiendekanat” before reregistration for the third semester during the second semester.</p>	Obligatory		
<p>Methods in Life Sciences (suggested studyplan)</p> <p>Lecture series; 8-9 a.m. / We, Thu, Fr, / Lecture hall A103; Online registration is required: orp from 1.Oct until 21.Dec. Lecture specific WueCampus2 course available;</p> <p>Examination:</p> <p><i>passed test</i>; obligatory online registration under “Ergänzende Leistungen” under module Methods in Life Sciences B, orp from 1.Oct until 31.Jan; date 13.Feb 2017, 9.15 a.m., Lecture hall A103; 7 ECTS</p> <p><i>graded test</i>; obligatory online registration under “Ergänzende Leistungen” under module Methods in Life Sciences, orp from 1.Oct until 31.Jan; date 13.Feb 2017, 9.15 a.m., Lecture hall A103; 10 ECTS</p>	Additional Achievements Winter	10	3
<p>Topics and Concepts in Life Sciences (only, if not chosen under topic “Molecular Biology”)</p> <p>Lecture series; Mo 8-11 a.m., Tue 8-9 a.m. / Lecture hall A103; Online registration is required: orp from 1.Oct until 21.Dec. Lecture specific WueCampus2 course available;</p> <p>Examination:</p> <p><i>passed test</i>; obligatory online registration under “Ergänzende Leistungen” under module Topics and Concepts in Life Sciences B, orp from 1.Oct until 31.Jan; date 20.Feb 2017, 9.15 a.m., Lecture hall A103; 7 ECTS</p> <p><i>graded test</i>; obligatory online registration under “Ergänzende Leistungen” under module Topics and Concepts in Life Sciences, orp from 1.Oct until 31.Jan; date 20.Feb 2017, 9.15 a.m., Lecture hall A103; 10 ECTS</p>	Additional Achievements Winter	7 or 10	3
<p>Biochemistry, physiology and genetics of mammalian cell culture</p> <p>Seminar; Two days Block 16.and 17.March / Lecture hall A102; Online registration is required: orp will open in January, Information through WueCampus2 forum.</p> <p>Examination: <i>passed test</i>; obligatory online registration under “Ergänzende Leistungen” under module “Biochemistry, physiology and genetics of</p>	Additional Achievements Winter	5	3

Additional Achievements Winter	Area	ECTS	CoH
mammalian cell culture ", orp from 1.Oct until 31.Jan; date and place tba			
Molecular Tumor Biology Lecture series; Thu 12-2 p.m., Lecture hall A102; Online registration is required: orp from 1.Oct until 21.Dec. Examination: graded test; obligatory online registration under "Ergänzende Leistungen" under module Molecular Tumor Biology , orp from 1.Oct until 31.Jan; date and place of examination tba	Additional Achievements Winter	5	2
Immunology 1B Lecture and seminar; Online registration is required; Seminar Fr 2-4 p.m. Lecture hall A102; Information through Master WueCampus2 forum; Contact: Prof. Herrmann; herrmann-t@vim.uni-wuerzburg.de Examination: passed test; obligatory online registration under Immunology 1B , orp from 1.Oct until 31.Jan; date and place of examination tba	Additional Achievements Winter	7	3
Immunology 1BS Seminar; Online registration is required; Lecture Fr 2-4 p.m. Lecture hall A102; Further information through Master WueCampus2 forum; Contact Prof. Herrmann; herrmann-t@vim.uni-wuerzburg.de Examination: passed test; obligatory online registration under Immunology 1BS , orp from 1.Oct until 31.Jan; date and place of examination tba	Additional Achievements Winter	5	2
Virology 1B Lecture and Seminar; Wed 5-7 p.m. Institute of Virology, Verbacherstraße 7, Seminar Room. Obey also WueCampus2 forum; Contact Dr. Jochen Bodem; jochen.bodem@vim.uni-wuerzburg.de Examination: passed test; obligatory online registration under Virology 1B , orp from 1.Oct until 31.Jan; date and place of examination tba	Additional Achievements Winter	5	3
Biophysics and Biochemistry B Lecture; Tue 10-11 a.m., Lecture hall A103; Thu 8-10 a.m., Lecture hall A102; Online registration is required: orp from 1.Oct until 21.Dec. Examination: passed test; obligatory online registration under "Ergänzende Leistungen" under module Biophysics and Biochemistry B , orp from 1.Oct until 31.Jan; date and place of examination tba	Additional Achievements Winter	5	2
Neurogenetics of Behaviour B Lecture; Fr 11 a.m. until 1 p.m., Lecture hall A102; Online registration is required: orp from 1.Oct until 21.Dec. Examination: passed test; obligatory online registration under "Ergänzende Leistungen" under module Neurogenetics of Behavior B , orp from 1.Oct until 31.Jan; date and place of examination tba	Additional Achievements Winter	5	2
Tissue engineering as alternative for animal testing Seminar; Tue 5-8 p.m., Seminar Room SE 001, Röntgenring; Registration through christian.lotz@uni-wuerzburg.de is required; Examination: graded presentation; obligatory online registration under	Additional Achievements Winter	5	2

Additional Achievements Winter	Area	ECTS	CoH
“Ergänzende Leistungen” under module “Special Subject Studies Biology and Natural Science 4” , orp from 1.Oct until 31.Jan; date and place of examination tba			
<p>Linux and Perl</p> <p>Seminar; 5 days 6.3.2017-10.3.2017, 9 a.m. until 4 p.m.; Computer Room Building 80 North Campus; Online registration is required: orp from 1.Oct until 21.Dec.</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Linux and Perl, orp from 1.Oct until 31.Jan; date and place of examination tba</p>	Additional Achievements Winter	5	3
<p>Genetics, environment and molecular therapy concepts of cancer</p> <p>Seminar; 2 days block in March 2017; date and place tba; Online registration is required: orp will open in January; Information through WueCampus2 forum.</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module “Special Subject Studies Biology and Natural Science 2B”, orp from 1.Oct until 31.Jan; date and place tba</p>	Additional Achievements Winter	3	2

Additional Achievements Summer	Area	ECTS	CoH
<p>Clinical Tumor Biology</p> <p>Lecture series; Online registration is required: orp from 1.April until 31. May</p> <p>Examination: graded test; obligatory online registration under “Ergänzende Leistungen” under module Clinical Tumor Biology, orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer Term	5	2
<p>Pathogenicity of Microorganisms B</p> <p>Lecture and seminar; Online registration is required via online ticket; Lecture Fr 10-11 a.m. Lecture hall A102; Information through Master WueCampus2 forum and see online in course overview.</p> <p>Examination: passed test; obligatory online registration under topic Cell and Developmental Biology, orp from 1.Oct until 31.Jan; date and place will be announced</p> <p>Contact: Dr. Andreas Demuth andreas.demuth@uni-wuerzburg.de</p>	Additional Achievements Summer	5	2
<p>Signals and Differentiation</p> <p>Lecture Fr 10-11 a.m. Lecture hall A102; Seminar-Room C102; Information through Master WueCampus2 forum.</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Cell and Developmental Biology 2 B, orp from 1.April until 30.June; date and place of examination tba</p> <p>Contact: Prof. Ricardo Benavente benavente@biozentrum.uni-wuerzburg.de</p>	Additional Achievements Summer	3	1

Additional Achievements Summer	Area	ECTS	CoH
<p>Immunology 2B</p> <p>Lecture and seminar; Online registration is required; Seminar Fr 2-4 p.m. Lecture hall A102; Information through Master WueCampus2 forum; contact Prof. Thomas Herrmann; herrmann-t@vim.uni-wuerzburg.de</p> <p>Examination: passed test; obligatory online registration under Immunology 2B, orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	7	3
<p>Immunology 2BS</p> <p>Seminar; Online registration is required; Lecture Fr 2-4 p.m. Lecture hall A102; Further information through Master WueCampus2 forum; contact Prof. Thomas Herrmann; herrmann-t@vim.uni-wuerzburg.de</p> <p>Examination: passed test; obligatory online registration under Immunology 2BS, orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	5	2
<p>Biochemistry, physiology and genetics of mammalian cell culture</p> <p>Seminar; Two days block end of July / Lecture hall A102; Online registration is required: orp will open in January; Information through Master WueCampus2 forum</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under Module Biochemistry, physiology and genetics of mammalian cell culture; orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	5	3
<p>Biophysics and Molecular Biotechnology B</p> <p>Lecture Tue 5-7 p.m. Lecture Seminar-Room C102; Information through Master WueCampus2 forum; Online registration is required: orp from 1.April until 31. May</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Biophysics and Molecular Biotechnology B; orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	5	2
<p>Mass Spectrometry and Proteomics</p> <p>Lecture Mo 10-11 a.m. Lecture hall A102; Online registration is required: orp from 1.April until 31. May</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Molecular Techniques, orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	3	1
<p>Virology 2B</p> <p>Lecture and Seminar; tba. Obey also WueCampus2 forum; For questions Dr. Jochen Bodem; jochen.bodem@vim.uni-wuerzburg.de</p> <p>Examination: passed test; obligatory online registration under Virology 2B, orp from 1.April until 30.June; date and place of examination tba</p>	Additional Achievements Summer	5	3

Additional Achievements Summer	Area	ECTS	CoH
<p>Plant Ecology B</p> <p>Lecture series; Mo,Tue, Fr 8-9 a.m. Lecture hall A102; Information through Master WueCampus2 forum; Online registration is required: orp from 1.April until 31. May</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Plant Ecology B; orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	5	2
<p>Experimental Sociobiology B</p> <p>Lecture/Seminar, Mo 9-12 a.m. Lecture hall A102; Information through Master WueCampus2 forum; Online registration is required: orp from 1.April until 31. May</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Experimental Sociobiology B; orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	7	3
<p>Animal Ecology and Tropical Biology B</p> <p>Lecture, Thu 5-7 p.m. Lecture hall A102; Information through Master WueCampus2 forum; Online registration is required: orp from 1.April until 31. May</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Animal Ecology and Tropical Biology B; orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	5	2
<p>Endogenous clocks B</p> <p>Lecture, Fr 11 a.m. until 1 p.m. Lecture hall A102; Information through Master WueCampus2 forum; Online registration is required: orp from 1.April until 31. May</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Endogenous clocks B; orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	5	2
<p>Neuromodulation and Neuronal Development B</p> <p>Lecture, Tue 3-5 p.m. Lecture hall A102; Information through Master WueCampus2 forum; Online registration is required: orp from 1.April until 31. May</p> <p>Examination: passed test; obligatory online registration under “Ergänzende Leistungen” under module Neuromodulation and Neuronal Development B; orp from 1.April until 30 June; date and place of examination tba</p>	Additional Achievements Summer	5	2