

## Annex SFB

### Studienfachbeschreibung (subject description, SFB) for the subject Food Chemistry as a Bachelor's with 1 major with the degree "Bachelor of Science" (180 ECTS credits)

Responsible: Faculty of Chemistry and Pharmacy  
Responsible: Institute of Pharmacy and Food Chemistry

Examination regulations version: 2015  
Examination regulations version: 2015

Abbreviations used: Course types: **E** = field trip, **K** = colloquium, **O** = conversatorium, **P** = placement/lab course, **R** = project, **S** = seminar, **T** = tutorial, **Ü** = exercise, **V** = lecture

Term: **SS** = summer semester, **WS** = winter semester

Methods of grading: **NUM** = numerical grade, **B/NB** = (not) successfully completed

Regulations: **(L)ASPO** = general academic and examination regulations (for teaching-degree programmes), **FSB** = subject-specific provisions, **SFB** = list of modules

Other: **A** = thesis, **LV** = course(s), **PL** = assessment(s), **TN** = participants, **VL** = prerequisite(s)

Conventions for the modules in this SFB: Unless otherwise stated, courses and assessments will be held in German, assessments will be offered every semester and modules are not creditable for bonus.

Information on assessment procedures: Should there be the option to choose between several methods of assessment, the lecturer will agree with the module coordinator on the method of assessment to be used in the current semester by two weeks after the start of the course at the latest and will communicate this in the customary manner.

Should a module comprise more than one graded assessment, all assessments will be equally weighted, unless otherwise stated below.

Should the assessment comprise several individual assessments, successful completion of the module will require successful completion of all individual assessments.

In accordance with the general regulations governing the degree subject described in this module catalogue:

**ASPO2015**

associated official publications (FSB (subject-specific provisions)/SFB (list of modules)):

**28-Sep-2015 (2015-156) up to minor changes in modules 07-LMC-BIO1-152 (additional information), 11-PFNF-152 (allocation of places), 03-TR-152 (additional information), 06-LMC-LMCo-152 (method of assessment), 08-LMC-LMD-162 (courses, method of assessment), 08-LMC-FSQ1-162 (method of assessment)**

This module handbook seeks to render, as accurately as possible, the data that is of statutory relevance according to the examination regulations of the degree subject. However, only the FSB (subject-specific provisions) and SFB (list of modules) in their officially published versions shall be legally binding. In the case of doubt, the provisions on, in particular, module assessments specified in the FSB/SFB shall prevail.

Every module will be described using the following form:

Abbreviation	<b>Module title</b>						
	ECTS		Duration	(in semesters)	Method of grading		Module level
	Courses		To be specified in the form X (y) with course type X abbreviated as specified above and number of weekly contact hours y				
	Method of assessment						
	Only after successful completion of		if applicable				
	Other prerequisites		if applicable				
	Participants and allocation of places		if applicable				
	Additional information		if applicable				
	Referred to in LPO I		if applicable (examination regulations for teaching-degree programmes)				

Compulsory Courses (150 ECTS credits)							
10-M-MCB-152-m01	<b>Mathematics for students in Chemistry and Biology</b>						
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	V (3) + Ü (2)					
	Method of assessment	written examination (approx. 90 to 120 minutes) and written exercises (approx. 25)					
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. I 2. Letter f) of Annex 1 of APOLmCh.					
07-LMC-BIO1-152-m01	<b>General Biology of Economic Plants from Food and Forage</b>						
	ECTS	7	Duration	2 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	V (2) + V (1) + P (4)					
	Method of assessment	a) written examination (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)					
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. I 2. Letter e) of Annex 1 of APOLmCh and No. 5 of Annex 2 of APOLmCh.					
08-LMC-AC1-152-m01	<b>General and Inorganic Chemistry for Food Chemistry Students</b>						
	ECTS	14	Duration	1 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	V (2) + S (2) + P (8)					
	Method of assessment	a) written examination (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups of 2 candidates (approx. 30 minutes total) and a) Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments (approx. 2 to 4 pages per analysis, no more than 60 pages total) or b) completion and written documentation (approx. 1 to 2 pages) of a theoretical assignment (approx. 30 minutes), Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments in lab notebook (approx. 2 to 4 pages per analysis, no more than 60 pages total).					
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. I 2. Letter a) and No. I 1. Letter a) of Annex 1 of APOLmCh and No. 1 of Annex 2 of APOLmCh.					
11-EFNF-152-m01	<b>Introduction to Physics for Students of other Disciplines</b>						
	ECTS	7	Duration	2 semester	Method of grading	numerical grade	Modul level   undergraduate
	Courses	V (4) + V (3)					
	Method of assessment	written examination (60 to 120 minutes)					

11-PFNF-152-m01	<b>Laboratory Course Physics for Students of other Disciplines</b>							
	ECTS	3	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (4)						
	Method of assessment	a) practical assignment with oral test (approx. 15 minutes, during experiments) and b) written examination (90 minutes). Each experiment comprises preparation, performance and evaluation. Test as well as performance of experiments can each be repeated once.						
	Participants and allocation of places	Only as part of pool of general transferable skills (ASQ): 10 places (lottery)						
o8-LMC-AC2-152-m01	<b>Quantitative Inorganic Chemistry for Food Chemistry Students</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (3) + Ü (1)						
	Method of assessment	a) written examination (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)						
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. I 2. Letter a) and No. I 1. Letter a) of Annex 1 of APOLmCh and No. 1 of Annex 2 of APOLmCh.						
o8-LMC-AC3-152-m01	<b>Quantitative Inorganic Analysis for Food Chemistry Students</b>							
	ECTS	14	Duration	2 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (10) + S (1) + S (1)						
	Method of assessment	a) Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments (approx. 2 to 4 pages per analysis, no more than 60 pages total) or b) completion and written documentation (approx. 1 to 2 pages) of a theoretical assignment (approx. 30 minutes), Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments in lab notebook (approx. 2 to 4 pages per analysis, no more than 60 pages total) and talk (approx. 20 minutes) Assessment offered: Once a year, summer semester						
	Modules successfully completed	o8-LMC-AC1						
Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. I 2. Letter a) and No. I 1. Letter a) of Annex 1 of APOLmCh and No. 1 of Annex 2 of APOLmCh.							

o8-PC-Bio-152-mo1	<b>Physical Chemistry for Biology Majors</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (1) + P (1)						
	Method of assessment	written examination (approx. 60 minutes) and assessment of practical skills during lab course (ungraded): Vortestate/Nachtestate (pre and post-experiment exams, approx. 15 minutes each), assessment of practical assignments, log (approx. 5 to 10 pages) Assessment offered: Once a year, winter semester						
	other prerequisites	Successful completion of the written examination serves as proof of all safety-related skills and is a prerequisite for attendance of the lab course.						
Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. 1 2. Letter c) and No. 1 1. Letter c) of Annex 1 of APOLmCh and No. 3 of Annex 2 of APOLmCh.							
o8-LMC-OC-152-mo1	<b>Organic Chemistry Including Nomenclature and Stereochemistry for Food Chemistry Students</b>							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	S (1) + S (1) + V (1) + V (3)						
	Method of assessment	a) written examination (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)						
Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. 1 2. Letter b) and No. 1 1. Letter b) of Annex 1 of APOLmCh and No. 2 of Annex 2 of APOLmCh.							
o8-LMC-OCP-152-mo1	<b>Practical Course in Organic Chemistry for Food Chemistry Students</b>							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (12)						
	Method of assessment	a) Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments (approx. 2 to 4 pages per analysis, no more than 60 pages total) or b) completion and written documentation (approx. 1 to 2 pages) of a theoretical assignment (approx. 30 minutes), Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments in lab notebook (approx. 2 to 4 pages per analysis, no more than 60 pages total)						
	Modules successfully completed	o8-LMC-AC1						
	other prerequisites	Successful completion of a written examination (90 to 120 minutes) serves as proof of all safety-related skills and is a prerequisite for attendance of the lab course.						
Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. 1 2. Letter b) and No. 1 1. Letter b) of Annex 1 of APOLmCh and No. 2 of Annex 2 of APOLmCh.							

03-TR-152-m01	<b>Toxicology and legal studies</b>							
	ECTS	3	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (1) + V (1)						
	Method of assessment	written examination (approx. 90 minutes)						
	Referred to in LPO I	§ 22 II Nr. 1 h) § 22 II Nr. 2 f) § 22 II Nr. 3 f)						
o8-BC1-152-m01	<b>Biochemistry 1</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (1)						
	Method of assessment	written examination (approx. 60 to 90 minutes)						
	Referred to in LPO I	§ 42 I Nr. 2 § 62 I Nr. 2						
o8-BC2-152-m01	<b>Biochemistry 2</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + Ü (1)						
	Method of assessment	written examination (approx. 60 to 90 minutes)						
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. II 2. Letter e) and No. II 1. Letter c) of Annex 1 of APOLmCh and No. 3 of Annex 3 of APOLmCh.						
o8-LMC-IA-152-m01	<b>Introduction to Instrumental Analysis for Food Chemistry Students</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (3)						
	Method of assessment	a) written examination (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)						
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. I 2. Letter a) of Annex 1 of APOLmCh and No. 1 of Annex 2 of APOLmCh.						

o8-LMC-LMA-152-mo1	<b>Instrumental Analysis for Food Chemistry Students</b>							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	S (1) + S (1) + P (10)						
	Method of assessment	a) Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments (approx. 2 to 4 pages per analysis, no more than 60 pages total) or b) completion and written documentation (approx. 1 to 2 pages) of a theoretical assignment (approx. 30 minutes), Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments in lab notebook (approx. 2 to 4 pages per analysis, no more than 60 pages total)						
	Modules successfully completed	o8-LMC-AC3, o8-LMC-OCP or o8-OCP1-LMC						
Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. I 2. Letter a) and No. I 1. Letter a) of Annex 1 of APOLmCh and No. 1 of Annex 2 of APOLmCh.							
o8-LMC-LMCo-152-mo1	<b>Introduction to Food Chemistry</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (1) + S (1)						
	Method of assessment	[a] written examination (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total) and presentation (approx. 20 minutes)						
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. I 2. Letter a) and No. I 1. Letter a) of Annex 1 of APOLmCh.						
o7-LMC-BIO2-152-mo1	<b>Microbiology for Food Chemistry students</b>							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	V (2) + Ü (3)						
	Method of assessment	Log (approx. 30 pages) Assessment offered: Once a year, summer semester						
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. II 2. Letter f) and No. II 1. Letter b) of Annex 1 of APOLmCh and No. 4 of Annex 3 of APOLmCh.						
o3-LMC-HYG-152-mo1	<b>Microbiology of Food and Hygiene for Food Chemistry Students</b>							
	ECTS	5	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + P (2)						
	Method of assessment	a) written examination (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total)						
	Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. II 2. Letter f) and No. II 1. Letter b) of Annex 1 of APOLmCh and No. 4 of Annex 3 of APOLmCh.						

o8-LMC-LMC-152-mo1	<b>Food Chemistry</b>							
	ECTS	14	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + S (2) + S (1) + V (1) + S (2) + S (1)						
	Method of assessment	[a) written examination (60 to 120 minutes) or b) oral examination of one candidate each (approx. 20 minutes) or c) oral examination in groups (groups of 2, approx. 30 minutes total); 100 per cent of grade] and 1 talk per semester (approx. 45 minutes per talk, ungraded)						
Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. II 1. Letter a) of Annex 1 of APOLmCh.							
o8-LMC-LM-CP-152-mo1	<b>Practical Course in Food Chemistry</b>							
	ECTS	13	Duration	2 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (10) + P (14)						
	Method of assessment	a) Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments (approx. 2 to 4 pages per analysis, no more than 60 pages total) or b) completion and written documentation (approx. 1 to 2 pages) of a theoretical assignment (approx. 30 minutes), Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments in lab notebook (approx. 2 to 4 pages per analysis, no more than 60 pages total) and summary report (approx. 15 to 20 pages each)						
	Modules successfully completed	o8-LMC-LMA						
Additional Information	Pursuant to Section 2 Subsection 2 Sentence 2 Verordnung über die Ausbildung und Prüfung der Staatlich geprüften Lebensmittelchemikerinnen und Lebensmittelchemiker (Regulation on the training and examination of state-certified food chemists, APOLmCh) in conjunction with No. II 1. Letter a) of Annex 1 of APOLmCh.							
<b>Key Skills Area (20 ECTS credits)</b>								
<b>General Key Skills (5 ECTS credits)</b>								
Students may select any of the modules offered as part of the pool of general transferable skills (ASQ) of JMU.								
<b>Subject-specific Key Skills (15 ECTS credits)</b>								
o8-LMC-FSQ1-152-mo1	<b>Analysis Strategies</b>							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	S (2) + S (2)						
Method of assessment	written exercises (approx. 10 pages) Assessment offered: Once a year, winter semester							
o8-LMC-FSQ2-152-mo1	<b>Quality Management</b>							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	V (1) + Ü (2)						
Method of assessment	term paper (approx. 20 pages)							



o8-LMC-MBA-152-m01	<b>Introduction to Molecular Biological Analysis for Food Chemistry Students</b>							
	ECTS	5	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (3) + S (2)						
	Method of assessment	a) Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments (approx. 2 to 4 pages per analysis, no more than 60 pages total) or b) completion and written documentation (approx. 1 to 2 pages) of a theoretical assignment (approx. 30 minutes), Vortestate and Nachtestate (pre and post-experiment exams, approx. 15 minutes), documentation and assessment of practical assignments in lab notebook (approx. 2 to 4 pages per analysis, no more than 60 pages total)						
Modules successfully completed	o8-LMC-LMA							
<b>Thesis (10 ECTS credits)</b>								
o8-LMC-BA-152-m01	<b>Bachelor Thesis Food Chemistry</b>							
	ECTS	10	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	No courses assigned to module						
	Method of assessment	Bachelor's thesis						
Additional Information	Time to complete: 8 weeks.							