

## 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: 2021  
Examination regulations version: 2021

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)):

**27-May-2021 (2021-40)**

**22-Mar-2022 (2022-15)**

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	Mathematics for students in Chemistry and Biology							
	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	General Biology of Economic Plants from Food and Forage							
	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-AC1-152-m01	Principles of Inorganic Chemistry							
	ECTS	8	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (4) + V (2)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
	Referred to in LPO I	§ 42 I Nr. 1 and § 22 II Nr. 1 h) § 62 I Nr. 1						
08-ACP1-152-m01	Inorganic Chemistry 1 (lab)							
	ECTS	10	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (12) + S (2)						
	Method of assessment	[a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes)] and Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical assignments (2 to 4 random examinations) Assessment offered: Once a year, winter semester Language of assessment: German and/or English						
11-EFNF-152-m01	Introduction to Physics for Students of other Disciplines							
	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-AS1-152-m01	<b>Inorganic Chemistry of the Elements</b>							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses	V (2) + V (2)						
	Method of assessment	a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English						
	Referred to in LPO I	§ 62 I Nr. 1						
o8-ANP-152-m01	<b>Analytical Chemistry (lab)</b>							
	ECTS	6	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses	P (12) + S (1)						
	Method of assessment	Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Assessment offered: Once a year, summer semester Language of assessment: German and/or English						
o8-PC-Bio-152-m01	<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-OC1-152-mo1	<b>Organic Chemistry 1</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 (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Referred to in LPO I		§ 62 I Nr. 2					
o8-OC2-VL-152-mo1	<b>Organic Chemistry 2</b>							
	ECTS	6	Duration	1 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (3) + Ü (1)					
	Method of assessment		a) written examination (approx. 90 to 180 minutes) or b) oral examination of one candidate each (20 to 30 minutes) or c) oral examination in groups of up to 3 candidates (approx. 15 minutes per candidate) or d) log (approx. 20 pages) or e) presentation (approx. 30 minutes) Language of assessment: German and/or English					
	Referred to in LPO I		§ 42 I Nr. 2 and § 22 II Nr. 1 h) § 62 I Nr. 2					
o8-OCP1-LMC-212-mo1	<b>Organic Chemistry - laboratory course for Food Chemistry students</b>							
	ECTS	9	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		P (12) + S (2)					
	Method of assessment		Vortestate/Nachtestate (pre and post-experiment examination talks approx. 15 minutes each, log approx. 5 to 10 pages each) and assessment of practical performance (2 to 4 random examinations) Language of assessment: German and/or English Assessment offered: Once a year, winter term					
	Modules successfully completed		o8-OC1 and (o8-ACP1 or o8-ANP)					
	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 1. Letter b) of Annex 1 of APOLmCh and No. 2 of Annex 2 of APOLmCh.					
o8-LMC-Ch-212-mo1	<b>Chemometrics</b>							
	ECTS	3	Duration	1 semester	Method of grading	(not) successfully completed	Modul level	undergraduate
	Courses		S (2)					
	Method of assessment		written exercises (approx. 10 pages) Assessment offered: Once a year, winter term					
	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 a) of Annex 1 of APOLmCh and No. 1 of Annex 3 of APOLmCh.					

o3-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-192-mo1	<b>Food Chemistry</b>							
	ECTS	10	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		V (2) + V (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. II 1. Letter a) of Annex 1 of APOLmCh.					
o8-LMC-LM-CP-192-mo1	<b>Practical Course in Food Chemistry</b>							
	ECTS	17	Duration	2 semester	Method of grading	numerical grade	Modul level	undergraduate
	Courses		P (12) + P (12) + S (2) + S (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)					
	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.						
Key Skills Area (20 ECTS credits)								
General Key Skills (5 ECTS credits)								
Students may select any of the modules offered as part of the pool of general transferable skills (ASQ) of JMU.								
Subject-specific Key Skills (15 ECTS credits)								
Subject-specific Key Skills, Compulsory Courses (15 ECTS credits)								
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-FSQ2-192-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		written exercises (approx. 10 pages) Assessment offered: Once a year, summer semester					



o8-LMC-MBA-192-mo1	Introduction to Molecular Biological Analysis for Food Chemistry Students							
	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) Assessment offered: usually once a year, winter semester					
	Modules successfully completed		o8-LMC-LMA					
Thesis (10 ECTS credits)								
o8-LMC-BA-152-mo1	Bachelor Thesis Food Chemistry							
	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.					