ASIIN

14

# Subject-Specific Criteria of the Technical Committee 14 – Medicine

*for the accreditation of degree programmes*
*in the domains of human medicine, dentistry,*
*veterinary medicine, nursing science, and health sciences*
*(adopted: 25.06.2026)*

The following specifications complement the "Criteria for the Accreditation of Degree Programmes – ASIIN Accreditation Seal".

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## 1 Preliminary Note

### 1.1 Function and Context

The Subject-Specific Criteria (SSC) of Technical Committee 14 – Medicine are based on the premise that higher education institutions independently define the intended learning outcomes of

the degree programmes submitted for accreditation in line with the respective institutional profile. These intended learning outcomes form the central basis for assessing the curricula of the degree programmes under review.

In addition, the SSC of each ASIIN Technical Committee fulfil a number of important functions:

- The SSC are the result of regular assessment by the responsible ASIIN Technical Committee and summarise the views of academia and professional practice on current standards in higher education as well as on the future qualification requirements of the labour market.
- The expectations formulated in the SSC regarding the achievement of educational objectives, learning outcomes and competence profiles are not static; they are subject to continuous review in close cooperation with the relevant subject-specific and professional organisations, such as faculty conferences, scientific societies and professional associations.
- The SSC support applicant higher education institutions in critically reflecting on the coherence of their own learning outcomes, curricula and quality objectives and in evaluating their position in relation to their own goals.

In accreditation procedures, the SSC also provide a technically well-founded basis for dialogue between auditors, higher education institutions and the ASIIN committees. They thereby make an important contribution to the comparability of national and international accreditation procedures and ensure that auditors apply the same subject-specific standards in every procedure. At the same time, the SSC define the knowledge, skills and competences considered to represent the current state of science and practice in a subject area; these may, however, be exceeded or adapted where necessary to achieve the intended learning outcomes of a degree programme.

## 1.2 Scope of Application

Medical education systems vary considerably around the world, meaning that the standard division into Bachelor's and Master's degrees is often not applicable. The purpose of training in the broader medical domain is generally to meet the technical and regulatory requirements of a specific professional role – such as a doctor, dentist, veterinarian, nurse or therapist.

The training required to obtain the first professionally qualifying degree, which enables full professional registration, usually takes place in multi-stage degree programmes, the total duration of which significantly exceeds the standard duration of Bachelor's programmes in other disciplines.

Regardless of the specific professional qualification, the structure and organisation of these degree programmes are generally strictly regulated by national standards for training and professional practice in the healthcare sector.

Due to these particular classification issues, the present Subject-Specific Criteria define the competence standard for the first qualification level (e.g. for human medicine, equivalent to M3 in Germany), which students attain following an undergraduate degree in the respective discipline in Germany. This qualification level is classified as equivalent to at least a Bachelor's degree in the respective discipline.

The objectives and content of Master's programmes in the respective disciplines must either serve to deepen and specialise the competences acquired in Bachelor's programmes or aim to broaden interdisciplinary competences.

### 1.3 Cooperation of the Technical Committees

The Technical Committee 14 – Medicine cooperates with the other Technical Committees of ASIIN, especially in order to meet the requirements of interdisciplinary study programmes. The higher education institutions are requested to specify in the application what Technical Committee(s) the degree programme(s) should be assigned to for the purpose of the accreditation procedure.

The Technical Committee 14 – Medicine is responsible for degree programmes in which the majority of the content relates to human medicine, dentistry, veterinary medicine, nursing, or health sciences. If a degree programme contains only a significantly smaller proportion of this subject-specific content, the Technical Committee is responsible jointly with the other disciplines involved or only provides experts for the assessment.

## 2 Requirements for Degree Programmes in Human Medicine

*Referenced standards:*

- *German National Competence-Based Catalogue of Learning Objectives in Medicine (NKLM, version 2.0)*
- *WFME Global Standards for Quality Improvement in Basic Medical Education (2020)*
- *GMC Outcomes for Graduates*

At the **programme level**, the following overarching learning outcomes are assumed:

1. **Scientific foundations and science-based medicine:** Graduates have comprehensive biomedical, social-science and science-based foundations that enable them to analyse and assess medical issues soundly and to justify clinical decisions scientifically.
2. **Clinical assessment, diagnostics and patient care:** Graduates are able to diagnose and care for patients on a scientific basis. They make sound decisions on prevention, diagnostics and therapy and coordinate their implementation, taking individual, interdisciplinary and systemic factors into account.
3. **Professional conduct, ethics and responsibility:** Graduates act in their medical role in an ethically reflective, legally correct and professional manner. They assume responsibility for their patients, the team and the further development of healthcare in the sense of social responsibility.
4. **Communication, cooperation and interprofessional practice:** Graduates communicate empathetically, clearly and in a patient-centred manner. They work effectively in interprofessional teams, resolve conflicts constructively and assume situational leadership responsibility.

5. **Scientific competence, reflection and lifelong learning:** Graduates apply scientific methods critically, are able to assess research and quality development, and continuously reflect on their own learning and professional practice. They promote a learning culture in healthcare.
6. **System-oriented practice and social responsibility:** Graduates understand structures and processes of the healthcare system and act in a resource-conscious, preventive and sustainable manner. They actively engage in health protection, equal opportunities and safe, digital and future-oriented patient care.

At the **module level**, these learning outcomes are further differentiated:

| **Competence dimension** | **Learning outcome** | **Expected professional competence** |
|---|---|---|
| **1. Scientific foundations and science-based medicine** | | |
| 1.1 Biomedical and natural-science foundations | Describes the structure, function and pathophysiological mechanisms of the human body; explains principles of disease development and health maintenance. | Uses biomedical knowledge to analyse clinical symptoms, formulate hypotheses and derive diagnostic considerations. |
| 1.2 Social, behavioural and health sciences | Explains psychosocial, cultural and societal factors influencing health and disease; interprets epidemiological data. | Integrates biological, psychological and social perspectives into the assessment and care of patients and population groups. |
| 1.3 Scientific thinking and appraisal of science | Interprets scientific data, recognises bias and limitations of studies, and justifies clinical decisions on a scientific basis. | Systematically uses information sources and critically evaluates research findings, transfers scientific knowledge to individual situations and participates in the scientifically grounded further development of diagnostics and therapy. |
| **2. Clinical assessment, diagnostics and patient care** | | |
| 2.1 Medical history and clinical examination | Takes a structured and complete medical history and performs physical examinations on a scientific and patient-centred basis. | Performs clinical examinations precisely, safely and respectfully; analyses findings taking physiological and pathological relationships into account. |
| 2.2 Diagnostics and decision-making | Selects appropriate diagnostic procedures or performs diagnostics on a scientific basis, interprets results and establishes differential diagnoses. | Prioritises diagnostic and clinical problems, makes risk-adapted decisions and initiates science-based measures based on the findings. |

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| 2.3 Treatment planning and patient management | Develops, communicates and justifies individual, science-based treatment plans, taking comorbidities, prognosis and patient preferences into account. | Implements and evaluates treatment strategies, recognises complications early and adapts therapy in an interprofessional context. |
| **3. Professional conduct, ethics and responsibility** | | |
| 3.1 Professional ethics and medical attitude | Explains the basic principles of medical ethics according to current standards (autonomy, beneficence, non-maleficence, justice) and reflects on the physician's role. | Acts empathetically, respectfully and reflectively in complex ethical decision-making situations; justifies decisions in a comprehensible manner. |
| 3.2 Legal framework and professionalism | Knows the legal foundations of medical practice (e.g. informed consent, confidentiality, documentation). | Acts in a legally compliant, responsible and truthful manner; safeguards data protection, transparency and professional integrity in line with current international standards. |
| 3.3 Responsibility and societal mandate | Analyses the physician's role in its societal context; recognises links between medicine, politics and social justice. | Assumes responsibility for patient safety, fairness and quality in the healthcare system; engages in society. |
| **4. Communication, cooperation and interprofessional practice** | | |
| 4.1 Physician-patient communication | Describes principles of professional, empathetic and patient-centred communication; explains principles of informed consent. | Conducts trust-building conversations, promotes shared decision-making and takes emotional and cultural aspects into account. |
| 4.2 Collegial communication and teamwork | Knows the roles, tasks and responsibilities of other health professions and disciplines; explains principles of effective teamwork. | Coordinates interdisciplinary and interprofessional collaboration, communicates clearly and contributes to safe, cooperative care. |
| 4.3 Feedback, conflict and leadership competence | Explains principles of feedback, conflict resolution and situational leadership. | Accepts feedback, provides constructive feedback and assumes responsibility for processes within the team. |
| **5. Scientific competence, reflection and lifelong learning** | | |
| 5.1 Scientific work | Knows the basics of scientific methodology, statistics and quality research. | Identifies scientific or quality-assurance projects and critically applies science-based methods. |

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| 5.2 Self-reflection and professional learning | Recognises individual learning needs and uses feedback for personal development. | Manages one's own learning in a goal-oriented manner, integrates feedback and contributes to a learning culture within the team. |
| 5.3 Quality and knowledge development | Explains quality indicators, audit procedures and principles of care improvement. | Systematically evaluates clinical processes and derives improvement measures; assesses research, teaching and quality development. |
| **6. System-oriented practice and social responsibility** | | |
| 6.1 Healthcare system and care structures | Describes the structure, financing and governance mechanisms of the healthcare system. | Uses knowledge of the system for navigation, decision-making and resource conservation in patient care. |
| 6.2 Public health, prevention and sustainability | Explains principles of prevention, public health and sustainable health promotion. | Participates in prevention measures, implements public health measures according to current standards, promotes equal opportunities and integrates sustainability into medical practice. |
| 6.3 Quality, safety and digitalisation | Explains the basics of patient safety, a culture of error management and digital applications in healthcare. | Uses digital systems critically, recognises risks and contributes to the further development of safety and technology integration in interprofessional settings. |

The **structure of the curriculum** ensures that:

- Care for real patients only takes place after the student has demonstrated sufficient knowledge and skills. The ability to perform clinical applications must first be trained and assessed in appropriate preclinical environments. The required competences are verified through suitable gatekeeping examinations.
- Students come into contact with an appropriate range of patients and procedures and can perform the corresponding treatment procedures as often as necessary until they have reached the required level of competence.

With regard to patient contact, the higher education institution ensures that patients are informed that they may be treated by students and are informed about the possible implications of this treatment. The patient's consent to treatment by a student must be obtained and documented before treatment.

# 3 Requirements for Degree Programmes in Dentistry

*Referenced standards:*

- *German National Competence-Based Catalogue of Learning Objectives in Dentistry (NKLZ)*
- *ADEE Graduating European Dentist Curriculum*
- *Outcomes for Graduates of the General Dental Council*
- *Swiss Competence Profile Dentistry*

At the **programme level**, the following overarching learning outcomes are assumed:

1. **Scientific and dental foundations:** Graduates have a sound scientific and medical understanding that enables them to analyse linkages of biological, chemical and materials-science in a dental context based on evidence, and to apply them in clinical decisions.
2. **Diagnostics and treatment planning:** Graduates are able to collect and interpret dental diagnoses systematically and, on this basis, make differentiated, evidence-based and patient-centred treatment decisions.
3. **Clinical patient care:** Graduates master a broad spectrum of clinical treatment procedures in all central areas of dentistry. They can apply, evaluate and adapt these procedures safely, according to indication and in line with scientific standards and individual needs.
4. **Communication, professionalism and ethics:** Graduates communicate empathetically, clearly and responsibly with patients and within the interprofessional team. They act based on ethical principles, reflect on their role as practitioners and act professionally even in challenging situations.
5. **Science and lifelong learning:** Graduates are able to critically evaluate scientific information, transfer new findings into practice and continuously develop their professional expertise. They actively participate in quality assurance and innovation processes.
6. **Practice management and sustainability:** Graduates organise dental practice workflows efficiently and sustainably, taking economic, legal, digital and ecological aspects into account. They use modern technologies adequately and ensure data protection.
7. **Social responsibility and public health**: Graduates are aware of the social significance of dental care. They are committed to health equity, are familiar with public health concepts and develop measures to promote oral health in all population groups.

At the **module level**, these learning outcomes are further differentiated:

| **Competence dimension** | **Learning outcome** | **Expected professional competence** |
|---|---|---|
| **1. Scientific and dental foundations** | | |
| 1.1 Scientific and biological foundations | Describes the composition, structure and function of oral and craniofacial tissues as well as their interactions with systemic health, including fundamental knowledge of anatomy, histology, physiology, biochemistry, pathological anatomy and pathophysiology. Explains toxicological and allergological mechanisms and their relevance for dental diagnostics and therapy. | Applies biomedical knowledge of the entire organism to clinical situations, interprets findings in connection with systemic diseases and provides scientifically sound justification for diagnoses. |

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| 1.2 Dental materials and materials science | Explains the physical, chemical and biological properties of dental materials as well as their interaction with tissues. Identifies risks arising from toxicity or allergies and takes these into account during treatment. | Selects materials according to indication, processes them appropriately and assesses clinical outcomes with regard to function, aesthetics and biocompatibility. |
| 1.3 Scientific thinking and evidence appraisal | Critically interprets scientific studies, assesses validity and limitations, and justifies clinical decisions on an evidence-based basis. | Critically evaluates literature, guidelines and research findings and reliably transfers evidence into diagnostics and treatment planning. |
| **2. Diagnostics and treatment planning** | | |
| 2.1 Medical history and diagnostics | Conducts structured history-taking, clinical and imaging examinations while taking current international classifications and guidelines into account, and documents findings completely. | Collects, interprets and prioritizes findings, identifies risk factors and formulates differentiated diagnoses. |
| 2.2 Treatment planning and decision-making | Develops patient-centred treatment strategies while taking medical, psychosocial and ethical aspects into account (interdisciplinarity). | Prepares evidence-based treatment plans, communicates options with patients and adaptively adjusts measures in response to clinical changes. |
| **3. Clinical patient care** | | |
| 3.1 Prevention and health promotion | Explains concepts and strategies for the prevention of oral diseases at individual and population levels. | Develops and implements preventive measures, evaluates their effectiveness and promotes health literacy. |
| 3.2 Restorative dentistry | Knows indications, principles and techniques of restorative, conservative and endodontic treatments. | Performs restorative treatments safely, precisely and in accordance with guidelines; evaluates clinical outcomes and ensures patient safety. |
| 3.3 Periodontology | Describes the etiology, diagnostics and therapy of periodontal diseases. | Performs periodontal treatments according to indication, assesses the healing process and derives preventive measures. |
| 3.4 Prosthodontics and functional rehabilitation | Explains the fundamentals of occlusion, function and aesthetics as well as the indications and principles of prosthetic treatment. | Plans, carries out and evaluates prosthetic reconstructions to a high functional and aesthetic standard, taking interdisciplinary aspects into account. |

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| 3.5 Orthodontics | Has fundamental knowledge of the etiology, diagnostics and treatment principles of dental and skeletal malocclusions. | Recognises dental and skeletal malocclusions, assesses the need for orthodontic treatment and initiates appropriate further treatment or referral according to indication. |
| 3.6 Oral and maxillofacial surgery | Has fundamental knowledge of common and relevant conditions in oral and maxillofacial surgery, including inflammatory, traumatic, syndromic and neoplastic changes as well as their basic diagnostic and therapeutic principles. | Recognises oral and maxillofacial surgical conditions and treatment needs, initiates necessary basic and emergency measures and arranges appropriate further treatment or referral according to indication. |
| 3.7 Oral surgery and pain management | Knows surgical indications, principles of pain therapy and complication management. | Performs simple surgical procedures safely, masters pain management and recognises complications at an early stage. |
| 3.8 Paediatric and adolescent dentistry | Explains developmental phases of teeth and jaws as well as the special characteristics of paediatric treatment situations. | Diagnoses developmental disorders, communicates in an age-appropriate manner, performs age-appropriate treatments and motivates patients toward prevention. |
| **4. Communication, professionalism and ethics** | | |
| 4.1 Communication and dentist-patient interaction | Knows the principles of empathetic, clear and participatory communication. | Communicates respectfully, clearly and motivating; promotes trust and shared decision-making. |
| 4.2 Interprofessional collaboration | Explains the tasks and competencies of other health professions and the principles of multiprofessional cooperation. | Works effectively in interdisciplinary teams, refers patients according to indication and participates in integrated care. |
| 4.3 Feedback, conflict and team competence | Describes mechanisms of professional communication, feedback and conflict management. | Uses feedback constructively, contributes to conflict resolution and promotes a cooperative team culture. |
| 4.4 Professional ethics and legal foundations | Explains ethical principles, professional duties and legal frameworks of dental practice. | Acts in compliance with the law, with integrity and ethical reflection; respects autonomy, data protection and patient rights. |
| 4.5 Professional attitude and self-management | Reflects on the role, responsibility and limits of the dental profession. | Acts confidently, resiliently and responsibly; manages emotional and professional stress in a professional manner. |

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| **5. Science and lifelong learning** | | |
| 5.1 Scientific work and research competence | Knows methods of data collection, statistics and research logic. | Critically evaluates research findings, participates in projects and transfers findings into practice. |
| 5.2 Quality management and evidence transfer | Explains principles of quality assurance, a culture of learning from errors and guideline implementation. | Continuously reviews and improves treatment quality, participates in audits and quality initiatives. |
| 5.3 Lifelong learning and professionalisation | Recognises personal learning needs and develops strategies for competence development. | Independently plans continuing education and training, uses feedback and contributes to knowledge exchange and innovation in the professional field. |
| **6. Practice management and sustainability** | | |
| 6.1 Practice organization and economics | Describes the fundamentals of hygiene, personnel management, appointment scheduling and resource planning. | Organises practice workflows efficiently, economically and in a patient-oriented manner while complying with legal requirements. |
| 6.2 Digitalization and data security | Explains the fundamentals of digital technologies (CAD/CAM, radiology, documentation) and data protection. | Uses digital systems safely, integrates technologies into treatment processes and ensures data protection and information security. |
| 6.3 Sustainability and environmental awareness | Knows ecological aspects of dentistry and their importance for sustainable practice management. | Integrates sustainability principles into material selection, waste management and practice organization. |
| **7. Social responsibility and public health** | | |
| 7.1 Dentistry and society | Analyses social, economic and cultural factors influencing oral health. | Participates in health-promoting and social medicine projects and contributes to reducing health inequalities. |
| 7.2 Public health and dental public health | Describes concepts of prevention, epidemiology and population-based health promotion. | Develops and evaluates prevention programs and participates in public health initiatives at local or national level. |

The **structure of the curriculum** ensures that:

- Care for real patients only takes place after the student has demonstrated sufficient knowledge and skills. The ability to perform clinical applications must first be trained and assessed in appropriate preclinical environments. The required competences are verified through suitable gatekeeping examinations.

- Students come into contact with an appropriate range of patients and procedures and can perform the corresponding treatment procedures as often as necessary until they have reached the required level of competence.

With regard to patient contact, the higher education institution ensures that patients are informed that they may be treated by students and are informed about the possible implications of this treatment. The patient's consent to treatment by a student must be obtained and documented before treatment.

# 4 Requirements for Degree Programmes in Veterinary Medicine

*Referenced standards:*

- *Regulation on Licensing Veterinarians (TAppV)*
- *German Qualifications Framework (DQR)*
- *WOAH Veterinary Education Core Curriculum*
- *EAEVE/ECCVT Day One Competencies*

At the **programme level**, the following overarching learning outcomes are assumed:

1. **Scientific and subject-specific competence:** Graduates have sound scientific, biomedical and diagnostic knowledge enabling them to analyse and evaluate veterinary issues scientifically and independently perform diagnostic measures, always considering the One Health concept.
2. **Practical and methodological competence:** Graduates safely perform basic veterinary interventions, emergency measures and treatments in a manner appropriate to animals. They make clinical decisions based on current scientific knowledge and evidence-based guidelines.
3. **Ethical and legal competence:** Graduates act with legal certainty and ethical reflection in the field of tension between animal welfare, society and legal requirements. They recognise moral conflicts and make responsible decisions in accordance with professional and legal norms.
4. **Social and communicative competence:** Graduates communicate empathetically and comprehensibly with animal owners, professional colleagues and authorities. They cooperate in interdisciplinary teams and promote open and respectful collaboration.
5. **Personal and organisational competence:** Graduates reflect on their own actions, identify development needs and take responsibility for shaping learning processes in the spirit of lifelong learning. They act confidently in organisational, digital and quality-related processes of everyday veterinary practice.

At the **module level**, these learning outcomes are further differentiated:

| Competence dimension | Learning outcome | Expected professional competence |
|---|---|---|
| **1. Scientific and subject-specific competence** | | |
| 1.1 Biomedical foundations | Understands the anatomical, physiological, pathophysiological and microbiological foundations of veterinary practice, as well as the foundations of animal breeding, animal and environmental hygiene, animal nutrition, and food hygiene and toxicology. | Links natural-science foundations with clinical questions and explains pathophysiological linkages. |
| 1.2 Clinical diagnostics | Masters basic examination techniques, history-taking, sampling and diagnostic decision pathways. | Plans, performs and evaluates diagnostic measures independently at entry level. |
| 1.3 One Health and veterinary public health | Recognises relationships between animal, environmental and human health in the sense of the One Health concept. | Assesses zoonotic risks, hygiene chains and preventive measures based on evidence. |
| **2. Practical and methodological competence** | | |
| 2.1 Veterinary practice | Performs clinical examinations, treatments, simple surgical procedures and emergency measures professionally. | Applies standards safely, takes animal welfare and hygiene into account and knows the limits of one's own actions. |
| 2.2 Evidence-based decision-making | Researches, evaluates and uses scientific findings for veterinary practice. | Makes justified clinical decisions taking current evidence and guidelines into account. |
| **3. Ethical and legal competence** | | |
| 3.1 Animal welfare and ethics | Reflects on the profession's responsibility towards animals, humans and society. | Assesses ethical dilemmas and acts in an animal-welfare-oriented and morally justified manner. Bases one's own actions on a human-animal relationship appropriate to the animal species. |
| 3.2 Law and professional ethics | Knows relevant legal provisions (animal welfare, medicinal products, food and professional law). | Acts with legal certainty and in accordance with professional norms. |
| **4. Social and communicative competence** | | |
| 4.1 Communication | Communicates appropriately with animal owners, colleagues and authorities. | Conducts structured conversations and conveys diagnoses and recommendations empathetically and comprehensibly. |

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| 4.2 Teamwork and cooperation | Works effectively in interdisciplinary and interprofessional teams. | Contributes to shared decision-making and supports collegial co-operation. |
| **5. Personal and organisational competence** | | |
| 5.1 Self-management | Reflects on one's own actions, recognises learning needs and develops strategies for personal development. | Plans and manages learning processes independently and deals constructively with stress, uncertainty and errors. |
| 5.2 Organisational, quality and digital competence | Masters the basics of practice, inventory and quality management as well as digital documentation. | Documents correctly, uses IT systems safely and actively participates in quality and safety processes. |

# 5 Requirements for Degree Programmes in Nursing Science

*Referenced standards:*

- *German Qualifications Framework (DQR)*

At the **programme level**, the following overarching learning outcomes are assumed:

1. **Subject-specific and methodological competences:** Graduates have sound theoretical knowledge and practical skills that enables them to plan, implement, and critically evaluate nursing processes on a scientific basis.
2. **Personal and reflective competences:** Graduates act independently, self-reflective, and adhering to legal and professional standards.
3. **Social and communicative competences:** Graduates communicate empathetically and comprehensibly with patients and professional colleagues. They cooperate in interprofessional teams and promote open and respectful collaboration.
4. **Societal, cultural and ethical competences:** Graduates understand the structure of relevant societal, institutional, and legal frameworks and systems. They are able to adapt their caregiving to the needs according to the patients' different social, cultural, and individual characteristics.
5. **Organisational, digital and economic competences:** Graduates organise nursing practice workflows and development projects efficiently and sustainably, taking economic, legal, digital and ecological aspects into account. They use modern technologies for documentation and communication adequately and ensure data protection.
6. **Overarching action competence:** Graduates reflect on their own actions, identify development needs and take responsibility for shaping learning processes in the spirit of lifelong learning in the dynamic complex of nursing. They actively engage in health protection, equal opportunities and safe, digital and future-oriented patient care.

At the **module level**, these learning outcomes are further differentiated:

| Competence dimension | Learning outcome | Expected professional competence |
|---|---|---|
| **1. Subject-specific and methodological competences** | | |
| 1.1 Knowledge (understand, analyse, apply) | Knows the theoretical and empirical foundations of the nursing process, nursing-science models and evidence-based decision-making. | Uses scientific findings to justify, plan and evaluate nursing actions. |
| 1.2 Skills (apply, evaluate) | Plans, implements and evaluates nursing processes in a structured and evidence-based manner. | Makes safe and reflective decisions in complex situations using established nursing-science concepts. |
| 1.3 Evaluation and synthesis | Applies methods of nursing research and critically analyses studies. | Transfers research findings into practice (evidence-based nursing). |
| **2. Personal and reflective competences** | | |
| 2.1 Self-competence | Reflects on the ethical, legal and professional foundations of nursing practice. | Acts responsibly, with legal certainty and in a value-oriented manner. |
| 2.2 Self-regulation | Reflects on one's own actions and uses feedback for further development. | Demonstrates a strong professional self-concept and strives for lifelong learning. |
| **3. Social and communicative competences** | | |
| 3.1 Communicative competence | Communicates with patients, relatives and teams in a manner appropriate to the target group and situation. | Conducts counselling, training and conversations empathetically and in a goal-oriented manner. |
| 3.2 Cooperation competence | Works interprofessionally and coordinates care processes. | Promotes teamwork, conflict resolution and shared decision-making processes. |
| **4. Societal, cultural and ethical competences** | | |
| 4.1 Understanding of society and systems | Knows the structures of the healthcare system, legal frameworks and nursing-policy contexts. | Influences the further development of nursing care and social justice. |
| 4.2 Cultural sensitivity and diversity | Recognises different nursing care needs due to age, culture, gender or disability. | Shapes nursing care in a culturally sensitive and discrimination-free manner. |

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| **5. Organisational, digital and economic competences** | | |
| 5.1 Management competence | Plans, manages and evaluates work and nursing processes economically and with a quality orientation. | Guides nursing teams within defined areas of responsibility, prioritises resources in the direct care process and improves workflows at the level of nursing practice. |
| 5.2 Information and digital competence | Uses digital systems for documentation and communication. | Ensures data protection, data security and information quality. |
| 5.3 Project and quality development | Initiates and supports development projects in nursing practice. | Evaluates their effectiveness and sustainability. |
| **6. Overarching action competence** | | |
| 6.1 Integration/synthesis | Links subject-specific knowledge, reflection, communication and organisation. | Acts independently and responsibly in complex, dynamic nursing situations and on the basis of existing nursing-science knowledge. |

# 6 Requirements for Degree Programmes in Health Sciences

*Referenced standards:*

- *German Qualifications Framework (DQR)*
- *WHO Essential Public Health Functions (EPHF)*
- *European Core Competences for Public Health Professionals (ASPHER)*

At the **programme level**, the following overarching learning outcomes are assumed:

1. **Scientific and methodological competence:** Graduates have sound specialist knowledge in epidemiology, health economics and health services research as well as evidence-based practice, including clinical reasoning. They are able to systematically collect and analyse health-science data and translate them into recommendations for action based on quantitative and qualitative methodological standards.
2. **Fields of public health practice:** Graduates develop, implement and evaluate health-promoting and preventive measures, taking social inequality and structural conditions into account. They analyse and design public health strategies in an evidence-based and participatory manner.
3. **Ethical and legal competence:** Graduates act based on ethical principles and legal frameworks. They reflect on dilemmas, represent positions responsibly and ensure data protection as well as a legally compliant use of data.
4. **Social, communicative. and cooperative competence:** Graduates communicate in a scientifically sound, target-group-oriented and media-appropriate manner with stakehold-

ers in healthcare, the public and politics. They promote interdisciplinary and interprofessional cooperation and shape participatory processes sustainably and in a solution-oriented manner.

5. **Organisational competence:** Graduates are familiar with measures for organisational development and manage projects in the health sector effectively, taking resources, quality standards and digital opportunities into account. They use public health data professionally and can apply marketing strategies to position their own activities in the healthcare market.
6. **Personal and professional development:** Graduates reflect on their professional role, critically examine their practice, assume responsibility for their own actions, are prepared for continuous development and continuously develop their professional self-concept with a future-oriented perspective. They act responsibly based on ethical and professional standards in the social and political context of the health sciences.

At the **module level**, these learning outcomes are further differentiated:

| **Competence dimension** | **Learning outcome** | **Expected professional competence** |
|---|---|---|
| **1. Scientific and methodological competence** | | |
| 1.1 Subject-specific knowledge and statistics | Calculates epidemiological measures (incidence, prevalence, RR/OR); knows, applies and compares study designs; confidently applies and evaluates descriptive statistics, inferential statistical tests and simple models. | Plans analyses, conducts them independently, checks assumptions, transparently interprets effect sizes/uncertainty and derives action-relevant conclusions. |
| 1.2 Evidence and research | Systematically searches, recognises and assesses bias/confounding, classifies evidence and critically evaluates guidelines and reviews. | Translates evidence into justified recommendations; documents methodology reproducibly and reflects on limitations. |
| **2. Fields of public health practice** | | |
| 2.1 Health promotion and prevention | Designs, implements and evaluates theory- and evidence-led interventions (behavioural and structural prevention, settings).<br>Develops and evaluates structural and settings-based preventive measures to reduce health inequalities. | Develops viable measures with stakeholders, defines indicators/theory of change, measures impact and improves iteratively.<br>Develops evidence-based and equity-oriented public health strategies to reduce socially determined health inequalities.<br>Systematically integrates aspects of social inequality into the planning, implementation and evaluation of measures |

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| | Applies equity approaches (e.g. proportionate universalism, Health in All Policies).<br><br>Integrates climate adaptation and One Health perspectives (human-animal-environment) into strategies. | for prevention, health promotion, surveillance and governance.<br><br>Uses indicators/early-warning systems and develops intersectoral prevention and adaptation measures. |
| 2.2 Surveillance and health reporting | Selects suitable indicators/data sources; creates reports/visualisations appropriate to the audience; analyses inequalities (e.g. social inequalities, distribution of health risks and resources, climate health, One Health).<br><br>Analyses social determinants of health (e.g. education, income, work, housing, migration, gender, age) and systematically classifies their influence on health opportunities, disease burden and life expectancy.<br><br>Analyses social gradients in morbidity, mortality and health-relevant behaviour.<br><br>Examines the distribution of environmental and occupational burdens, prevention and care services, and financial, social and institutional resources.<br><br>Identifies structural barriers to access to health promotion, prevention and care.<br><br>Analyses exposure and environmental burdens (heat, air pollutants, noise, water, chemicals) and their health effects. | Performs data collection/integration with quality assurance, produces coherent reports and derives evidence-based recommendations for action.<br><br>Analyses the social distribution of health risks, disease burdens and resources in a differentiated and data-based manner, identifies structural causes of health inequality at micro, meso and macro levels, and evaluates health-policy, legal and institutional frameworks with regard to their effects on health equity.<br><br>Assesses environmental health risks. |
| 2.3 Healthcare system, structural conditions, | Classifies structures/financing of the national healthcare system; applies the policy cycle; | Analyses policy options, prepares policy briefs, acts with legal certainty and communicates governance implications comprehensibly. |

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| law and governance | takes relevant legal frameworks into account.<br>Knows and distinguishes the roles of the state, self-governance, civil society and international actors.<br>Classifies governance implications of different system models comparatively.<br>Analyses the effects of political, legal and economic frameworks (e.g. welfare state, social policy, healthcare system, labour market) on health inequality. | Analyses structures, financing logics and governance models of healthcare systems in national and international comparison. |
| 2.4 Emergency preparedness and resilience | Foundations of public health preparedness; risk/crisis communication. | Contributes to preparedness/response in a structured manner, prioritises measures and coordinates communication with stakeholders. |
| **3. Ethical and legal competence** | | |
| 3.1 Ethics and justice | Applies public health ethics (benefit/harm, solidarity, equity) to case examples. | Assesses dilemmas argumentatively, justifies decisions in line with values and law and documents transparency decisions. |
| 3.2 Data protection and compliance | Understands and implements data protection, data security, consent and secondary use. | Creates data-protection-compliant concepts, trains participants and continuously reviews compliance. |
| **4. Social, communicative, and cooperative competence** | | |
| 4.1 Risk and science communication | Prepares evidence in a target-group- and channel-appropriate manner (population, media, politics).<br>Communicates governance implications of health-policy decisions comprehensibly and based on evidence. | Develops clear core messages, visualisations and briefings; confidently moderates information/disinformation situations.<br>Communicates health and intervention risks in a target-group-appropriate manner. |
| 4.2 Inter-/transdisciplinary cooperation and participation | Clarifies roles/responsibilities in multiprofessional teams; designs co-creation with target groups. | Plans and moderates collaborative processes, achieves viable agreements and conflict resolutions. |

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| **5. Organisational competence** | | |
| 5.1 Organisational development, project and quality management | Structures projects with objectives, resources, schedules and KPIs; applies quality/safety management (PDCA). | Manages projects independently, documents effectively, evaluates processes and initiates improvements. |
| 5.2 Digital public health and data competence | Uses registries/information systems; data visualisation/dashboards; evaluation of digital interventions. | Uses IT systems confidently, creates robust visualisations and justifies data-based decisions. |
| **6. Personal and professional development** | | |
| 6.1 Self-regulation and reflection | Plans, manages and coordinates one's own learning (LLL), uses learning strategies and feedback for problem- and competence-oriented learning and recognises limits of responsibility. | Acts independently, reflects systematically and develops further in line with target agreements. |
| 6.2 Professional self-concept and role clarification | Explains the role of health sciences in society/politics/systems; lives values and professionalism; is prepared to address future challenges competently and innovatively. | Acts responsibly, justifies positions based on evidence and values and represents the discipline professionally. |

The matrix represents the common core at Bachelor's level. **Subject-specific specification** is provided through focus modules and measurable indicators for each dimension:

- Public health (classical): emphasis on surveillance/health reporting (GBE), policy and governance, and epidemiology/statistics.
- Health promotion/prevention/health education: focus on intervention design, participation, and didactics-based approaches.
- Health economics/management: addition of a sub-cluster on economics and financing (payers, benefit assessment, budget management).
- Health/science communication: expansion of the communication dimension to include media work, risk narratives and visual analytics.
- Digital health/data focus: focus on the data pipeline, interoperability, data protection/security and evaluation of digital interventions.
- Care-related profiles (e.g. nursing/healthcare management): stronger operationalisation of the organisational dimension (quality, patient safety, process/change management).