



**rijksuniversiteit
 groningen**



Assessment plan 2024-2025

Bachelor's degree programme

in Medicine

Part A

Year 1,2,3

Part B

Pre-Master's

University of Groningen

University Medical Center Groningen

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Introduction

This document describes the assessment plan for the University of Groningen Bachelor's degree programme in Medicine G2020 (part A) and Pre-Master's degree programme in Medicine G2020 (part B). The assessment plan contains the teaching modules, assessment methods, and assessment procedures for the Bachelor's degree programme and the Pre-Master's programme. In addition, this plan contains the learning outcomes for the Bachelor's degree programme. Further information about examinations can be found in the document (examinator requirements) of the Board of Examiners for Dentistry and Medicine (ECTG).

This document, which is an appendix to the Teaching and Examination Regulations (OER), is written by the programme within the rules set for assessment by the OER and the UG's Assessment Policy.

This assessment plan was drawn up in consultation with the ECTG and adopted by the Faculty Board of the Faculty of Medical Sciences on 22 May 2024, and approved by the O&O Council and the Medical Programme Committee where required on 22 May 2024.

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Program Directors of Medicine

1. Learning outcomes Bachelor's degree programme

1.1 National learning outcomes and G2020

The aim of the G2020 Bachelor's and Master's degree programmes in Medicine is to train students to become healthcare professionals with qualifications as described in the 2020 Framework for Undergraduate Medical Education¹.

The learning outcomes for the healthcare professional are formulated as competencies in different domains based on the CanMEDS framework. The purpose of the courses *Competency Development* is the acquisition of the Framework competencies at Bachelor level. In G2020, in accordance with the Framework, the following *competency domains* are used: Medical expertise (MED), Communication (COM), Collaboration (SAM), Scientific Training (WET), Leadership (LEI), Management in Social Context (MAH), Professionalism (PROF). The competencies are therefore leading for the learning goals of the competency development courses. Where applicable, the knowledge aspects and issues concerning health and illness are integrated into competency development courses.

The Framework also defines the knowledge domain (consisting of 23 knowledge aspects) as well as the issues concerning health and illness, which are divided into four main categories. Both elements provide the basis for the organization of the courses *Causes of Diseases*. In these courses, students acquire knowledge of basic and clinical subjects. Basic subjects include the medical and natural sciences, as well as the human and social sciences, that provide the underlying knowledge to gain a good understanding and insight into clinical conditions. In G2020, the following disciplines are included in the basic science subjects: anatomy, cell biology, pharmacology, physiology, histology, and pathology. The humanities and social sciences include the disciplines of medical psychology, medical sociology, developmental psychology, ethics, medical law, and part of public health (organization, financing, and quality of medicine). The learning goals are spread over the years when developing the content of the curriculum.

In appendices 1, 2, 3b, the competency matrices indicate how the contents of the courses *Causes of Diseases* and *Competency Development* relate to the learning outcomes in the Framework.

¹ In this document, hereinafter referred to as 'Framework'

Part A Bachelor's degree in Medicine

2. Structure of the G2020 Bachelor's degree programme

2.1 Structure

The curriculum of the G2020 Bachelor's degree programme (see Table 2.1) consists of:

- Courses Causes of Diseases
- Courses Competency Development
- Courses Knowledge Development

Table 2.1 Courses and distribution of ECs in years 1, 2 and 3

Semester 1.1	Semester 1.2
Causes of diseases 1.1 (5 EC)	Causes of diseases 1.4 (5 EC)
Causes of diseases 1.2 (7 EC)	Causes of diseases 1.5 (5 EC)
Causes of diseases 1.3 (6 EC)	Causes of diseases 1.6 (7 EC)
Competency development 1.1 (10 EC)	Competency development 1.2 (11 EC)
Knowledge development B1 (4 EC)	

Semester 2.1	Semester 2.2
Causes of diseases 2.1 (5 EC)	Causes of diseases 2.4 (5 EC)
Causes of diseases 2.2 (6 EC)	Causes of diseases 2.5 (5 EC)
Causes of diseases 2.3 (7 EC)	Causes of diseases 2.6 (8 EC)
Competency development 2.1 (10 EC)	Competency development (10 EC)
Knowledge development B2 (4 EC)	

Semester 3.1	Semester 3.2
Causes of diseases 3.1 (6 EC)	Causes of diseases 3.4 (4 EC)
Causes of diseases 3.2 (6 EC)	Causes of diseases 3.5 (4 EC)
Causes of diseases 3.3 (6 EC)	Competency development 3.2 (20 EC)
Competency development 3.1 (10 EC)	
Knowledge development B3 (4 EC)	

2.2 Courses Causes of diseases

In the *Causes of diseases* courses, over three years, students build up knowledge of basic subjects as well as clinical subjects. Explicitly programming the knowledge in these courses makes it recognizable for students. Each week, the Causes of Diseases course unit focuses on one health symptom (see appendix 4). Symptoms are clustered into themes of several weeks in order to prevent fragmentation and to provide structure for students. Examiners and lecturers mutually agree on the design of lines in themes and semesters to prevent gaps in knowledge development. The themes guide the content of the curriculum and are chosen so that there is a logical connection to the teaching material of the basic subjects. Learning goals have been formulated for each theme, which are derived from the Framework (see appendices 1 and 2).

2.3 Courses Competency development

In the *Competency development* courses, the student develops the competencies as formulated for the Bachelor's degree programme. Competency development takes place in the learning communities (LCs). There are four Learning Communities:

- Sustainable Care
- Intramural Care
- Innovative Healthcare
- Global Health (in English)

The teaching of the Competency Development courses is based on four learning pathways, namely:

1. Professional Development (PD): yellow learning pathway
2. Healthy Ageing (HA): blue learning pathway

3. Medical Communication (MC): green learning pathway
4. Scientific Training (ST): red learning pathway

The competencies from the Framework are linked to the learning pathways (see appendix 3b). These indicate the level expected at the end of year 3 of the Bachelor's degree. Learning outcomes for each academic year have been derived from the training courses, assignments, and other study activities. The course unit Competency Development 3.2 has a special status. This concerns the final part of the Bachelor's degree programme.

2.4 Knowledge Development

In the *Knowledge Development* courses, knowledge development is assessed using the Interfaculty Progress Test. The progress test is an objective instrument to measure students' knowledge and development in knowledge. The medical faculties of Nijmegen, Maastricht, Groningen, Leiden, Amsterdam (VU and AMC), Rotterdam, and Utrecht work together to offer their students relevant and high-quality test questions. It is not the curriculum that is tested, but rather what students learn during the degree programme. The test is about applying acquired knowledge. The difference in knowledge level is reflected in the difference in test scores. The progress test is taken four times a year, usually in September, December, February, and May. The expectation is that an individual student will achieve a higher score on each test than on previous tests as a result of knowledge acquired in the teaching programme. Since September 2022, the Progress Test is an adaptive test taken on a computer (<https://ivtg.nl>).

3. Assessment

3.1 Vision

The principles of the assessment programme are based on the University of Groningen's formulated requirements for a sound assessment programme², in combination with recent insights into and experience with longitudinal testing. The assessment vision in the curriculum dovetails with the ambitions, aims, and teaching modes of the degree programme. The assessment programme:

1. ensures the acquisition of knowledge, insight, skills, and the development of competencies
2. encourages students to be actively and continuously engaged with the study and the subject matter (*increase participation*)
3. invites students to want to grow and to demonstrate this growth (*increase motivation and stimulate academic attitude*)
4. provides regular feedback from the lecturer and peers on the students' competency development (*motivation and academic attitude*).

The testing programme systematically collects information about students' functioning and performance. Based on this information, students can be guided so that a summative decision can ultimately be made about study progress. By scheduling tests frequently and using different test formats, students are encouraged to develop competencies effectively and to start and continue working with the material.

The degree programme has various test formats that are appropriate to the nature of the learning goals of all courses and that meet the qualitative requirements of validity, reliability, transparency, and feasibility (efficiency). Appendix 5 contains a specification of these requirements. Completing the requirements per mode of assessment ensures the quality of the test and the different phases of the test cycle.³:

- 1) Composition & structuring
- 2) Taking the test
- 3) Analysis
- 4) Establishing the result and feedback
- 5) Evaluation and inspection
- 6) Resit
- 7) Archiving
- 8) Evaluation and action plan

3.2 G2020 test formats and characteristics

Table 3.1 gives a general overview of the assessment methods for the courses:

² UG Assessment Policy 2021-2026

³ The order or phase may be adapted to specific characteristics of a course unit

Table 3.1 Overview of test formats and features

Course unit	Mode of assessment	Characteristics
Causes of Diseases (CoD)	Written examination	1.1 to 3.5 Each CoD course unit has one written test. The test questions consist of multiple choice and closed and open-book questions.
	Attendance requirements	Attend practical classes (among others tutor group meetings) and 4 practical exercises (after registration) ⁵
Competency development 1.1 to 3.1	Portfolio assessment	Students work on developing competencies in the four learning pathways. There is a mix of test formats that generate partial marks for the seven competency domains. Mix of test formats: <ul style="list-style-type: none"> - Assignments - Performance assessment - Progress and final interview based on reflection report - Internship reports - Written test statistics 1.1 and 2.2 - Profile projects (two projects in year 2) - For years 1 and 2, written feedback provided by the tutor can be used for the final assessment, but this is not necessary. For year 3, the tutor assessment (written feedback and mark) counts towards completion of the Competency Development portfolio.
	Responsibilities	Present at small-group teaching and practicals ⁶ (among others coaching groups) Meeting portfolio obligations
Competency Development 3.2	Bachelor project (final project)	For the Scientific Training curriculum, students work in a team on a Bachelor project. The student must have obtained a pass for the proposal before being allowed to start the implementation of the Bachelor project. There is a mix of test formats that contribute to the final mark: <ul style="list-style-type: none"> - Thesis (team & individual) - Product (team) - Pitch (team) - Functioning in the Bachelor's project team (individual)
	Portfolio	For the Professional Development learning pathway, students compile a portfolio. There is a mix of test formats: <ul style="list-style-type: none"> - Elaboration of various assignments - Final interview based on SWOT analysis
	Responsibilities	Present at practicals and small-group teaching ⁷ (among others coaching groups) Meeting portfolio obligations
Knowledge Development (final project)	Written examination	<ul style="list-style-type: none"> - Interfaculty Progress Test - Digital multiple choice test according to the computerized adaptive testing (CAT) method. - Taken four times a year
	Responsibilities	Participation in four tests per academic year

⁴ With the exception of CoD courses 3.1 to 3.3, tutor group meetings are then part of Competency Development 3.1

⁵ For each CoD course unit, Brightspace indicates which practical exercises are mandatory

⁶ Brightspace indicates which practical exercises are mandatory for each CO course unit

⁷ Small-group teaching: MC training sessions, coaching group meetings, working groups, Professional Development practicals

4. Protocols and rules for conducting assessments

4.1 Assessment process for courses Causes of Diseases

Modes of assessment: Each course unit is concluded with a summative test, details of which are described below. Topics are classified into themes, and students further explore related issues during tutor group meetings. Formative activities are used in the tutor group meetings to frequently assess whether students have remembered and understood the study material.

Composition & structuring of summative test: When developing the curriculum, the learning goals were formulated for each theme, the teaching material was determined (derived from the Framework), and the cut-off method was established. The question format of all tests is 100% multiple choice and consists of closed-book and open-book test questions. A test matrix has been drawn up for each test based on the learning material and the learning goals. Based on this test matrix, the test questions are compiled by the examiner and reviewed by the test assessment panel. The course material, learning goals, and the number of questions on a test, as well as the cut-off method and weighting, are made available to students prior to the start of the course unit. It will be indicated in advance whether questions will be asked about material covered in previous themes and which is assumed to be known.

Testing: The tests will be taken at the designated location. The time of the test is given in the faculty's annual planning and the student timetable. The UG protocol is followed during the test. Any irregularities will be reported to the designated persons or authorities. The examiner is present during the test. They may be represented by a substitute appointed by the examiner.

Analysis: The examiner is responsible for the analysis. They are supported by the Test Office in this.

Evaluation and inspection: After the test, students are given the opportunity to review the test. After the analysis, each test is discussed with the Year Representation (YR) in the presence of a producer (secretary). The examiner will submit any content-related ambiguities to a subject-matter expert lecturer. The decisions in these meetings are made public by the examiner with substantive reasoning. At a later time, the test questions can be discussed with the lecturers by the examiner and the Test Assessment Panel (N.B. the suppliers of test questions). The results and any decisions made by the examiner will be discussed in this meeting.

Establishing the result and feedback: The examiner determines the final mark. The final mark can only be determined if the student has fulfilled all obligations. Failure to attend the tutor meetings and the scheduled compulsory practicals (without prior cancellation with a valid reason) will result in a fail for the course unit. The results of the tests are communicated to the student. The examiner is responsible for ensuring that this is done in an orderly manner.

Resit: Resits for each test take place once a year at a set time. Resits are scheduled so that there is as little competition as possible with other ongoing courses. If the practical requirements have not been met (but the summative test has been passed), the course unit is a fail, and a resit will follow in the form of a remedial assignment. If the course unit remains a fail after the resit of the test, the test for the relevant course unit must be retaken. If the mandatory practicals have already been completed, the student can follow them again at their own request (not mandatory).

Archiving: Archiving takes place in accordance with the legal frameworks concerning the retention periods of tests at the designated location.

Evaluation and action plan: The examiner writes a test report and sends it to the Director of Education and the Board of Examiners. Based on the test report and teaching evaluations, the examiner writes an action plan and the Director of Education approves this after discussing it. If necessary, the examiner will discuss the test report with the Board of Examiners. The ECTG approves the results, after which they are entered into Progress.

4.2 Assessment process for courses Competency Development Semester 1.1 to 3.1

Composition & structuring: When structuring the curriculum, the competency domains and competencies from the Framework have been linked to the learning pathways (see Appendix 3b). Based on this, the learning goals were derived. The mode of assessment per learning pathway, per assignment, per semester is determined in advance. The assessment indicators are derived from the learning goals and included in the assessment form. There is a rubric for determining marks. The assessment indicators, cut-off requirements, and obligations are determined in advance and are made clear to students at the start of the course unit.

Testing: The time of taking or submitting assessments (Medical Communication (MC) pathway) and submitting test products is indicated on BrightSpace. Written reports submitted will be screened for plagiarism. Attending the following practicals is mandatory: working group meetings, coaching group meetings, MC training sessions, Personal Development practicals, statistics practicals and clerkships (care clerkship and research placement), and the mandatory year 2 Profile Project practical. The products are collected in a digital portfolio.

Analysis: Lecturers who have supervised the student (in principle) for a semester provide feedback and marks for the pre-determined competency domains. Students receive formative feedback on their performance in the tutor group meetings, which are part of the Causes of Diseases course unit. The examiner can use this feedback on an indicative basis when determining the final mark for the Competency Development course unit. An exception to this is the tutor group meeting within Competency Development Programme 3.1; the tutor's mark is included in the final assessment by the examiner of the Competency Development course unit.

Determination and feedback: At the end of the semester, the examiner determines the final mark based on the student's dashboard. The examiner determines whether the student meets the cut-off requirements.

Resit: During the committee meeting, the examiner will determine the nature of the resit. There are two resit opportunities:

- Quick resit: one or more components must be resat, for which a resit time is planned.
- A long resit: this concerns a broader picture of inadequate performance. The resit takes place in the next semester: the student will be given specific learning goals and assignments to be completed in the next semester (in addition to all learning goals and assignments that are part of that semester). The examiner will determine the period within which the requirements must be met.

Additional provisions:

- After a resit, the maximum final mark that can be achieved for the course unit is a 6.
- A student whose portfolio is not completed on time and/or who has not made contact in time about any outstanding components will receive a fail for the course unit. If the portfolio is completed later (= resit), the student will receive a final mark based on the dashboard. In this case, the rule of a maximum mark of 6 does not apply.
- If the number of no-shows and fail marks is so high that it is impossible to take the resit in the next semester, the student will receive a fail grade and will have to resit the entire course unit by taking the corresponding course in the next academic year. In this case, the rule of a maximum mark of 6 does not apply.

Evaluation and inspection: The student can request a meeting with the examiner about the final assessment upon request.

Archiving: Archiving takes place in accordance with the legal frameworks concerning the retention periods of tests at the designated location.

Evaluation and action plan: The examiner writes a test report and sends it to the Director of Education and the Board of Examiners. Based on the test report and teaching evaluations, the examiner writes an action plan and discusses it with the Director of Education. The examiner will discuss the test report with the Board of Examiners if necessary. The ECTG approves the results, after which they are entered into Progress.

Statistics test assessment process, part of Competency Development 1.1 and 2.2 courses

Composition & structuring: The learning goals are based on the Framework. The question format of all tests is 100% multiple choice and consists of closed-book test questions. A test matrix has been drawn up for each test based on the learning material and the learning objectives. Based on this test matrix, the test questions are compiled by the examiner and reviewed by the test assessment panel. The course material, learning goals, and the number of questions on a test, as well as the cut-off method and weighting, are made available to students prior to the start of the course unit.

During the teaching sessions Statistics 1.1 and 2.2, students can earn bonus points by participating in practice tests, which are made available via Brightspace. These tests yield a maximum of 0.6 bonus points, which are added to the final mark of the test, up to a maximum final mark of 10. N.B. Statistics 3.1 does not conclude with a test.

Testing: The tests will be taken at the designated location. The time of the test is given in the faculty's annual planning and the student timetable. The UG protocol is followed during the test. Any irregularities will be reported to the designated persons or authorities. The examiner is present during the test. They may be represented by a substitute appointed by the examiner.

Analysis: The examiner is responsible for the analysis. They are supported by the Test Office in this.

Determination and feedback: The examiner determines the mark. The final mark can only be determined if the student has fulfilled all obligations. Failure to attend the scheduled compulsory practicals (without prior cancellation for a valid reason) will result in a fail for the course unit. The results of the tests are communicated to the student. The examiner is responsible for ensuring that this is done in an orderly manner.

Evaluation and inspection: After the test, students are given the opportunity to review the test. The examiner will submit any content-related ambiguities to a subject-matter expert lecturer.

Resit: See section on Competency Development Semester 1.1 to 3.1.

Archiving: Archiving takes place in accordance with the legal frameworks concerning the retention periods of tests at the designated location.

Evaluation and action plan: See section on Competency Development Semester 1.1 to 3.1.

4.3 Assessment process for courses Competency Development Semester 3.2

Composition & structuring: The learning objectives of Competency Development 3.2 are based on the Framework and were established during the development of the curriculum, as were the test format, cut-off point, and weighting. The assessment criteria, weighting, cut-off points, and obligations are clear to the student at the start of the course unit. Competency Development 3.2 is concluded with the Academic Theatre (AT). During the AT, the teams of the ten best pitches are selected, and a winner is announced. The three best theses will also be announced and a winner will be chosen from these three. These prizes do not affect the calculation of the final mark.

Testing: The time of assessment or submission is indicated in the test schedule. Reports submitted will be screened for plagiarism.

Analysis: Competent lecturers (supervisors, assessors, and coaches) who have guided the student (in principle) during the course unit provide feedback, marks, and assessments. These marks count towards the final mark for the Competency Development 3.2 course unit.

Determination and feedback: The examiner determines the final mark for the course unit, using the established weighting. At the end of a semester, an assessment meeting (examiners, Director of Education, and an independent observer) is held which is chaired by the examiner. The performance of students who do not meet the cut-off requirements is discussed in this assessment committee. The examiner communicates the results of the assessments within the course unit to students.

Evaluation and inspection: The student has the right to inspect the individual part of the assessed work, provided that the applicable rules are met. The group section can be viewed by the group as a whole, provided that the applicable rules are met.

Resit: Within the academic year, there is a partial possibility to resit Competency Development 3.2.

Archiving: Archiving takes place in accordance with the legal frameworks concerning the retention periods of tests at the designated location.

Evaluation and action plan: The examiner writes a test report and sends it to the Director of Education and the Board of Examiners. Based on the test report and teaching evaluations, the examiner writes an action plan and discusses it with the Director of Education. The examiner will discuss the test report with the Board of Examiners if necessary. The ECTG approves the results, after which they are entered into Progress.

4.4 Assessment process for courses Knowledge Development

Composition & structure: Composition, content, quality, and standardization take place under the auspices of the national Interuniversity Progress Test Working Group (WIV) in collaboration with the progress test assessment committees (VBCs) of the participating faculties. The Faculty's own progress test assessment committee (VBC), consisting of a chair and members from the basic and clinical disciplines, assesses the Faculty's own test questions. The correctness of the substance is examined, and the clarity of the formulation is checked. Relevance for a healthcare professional is also taken into account.

The test is offered according to a blueprint that guarantees the distribution of test questions within different categories and disciplines.

Testing: The test is administered by computer. Participation in all tests is mandatory. The test procedures are announced via the website (<https://ivtg.nl>) and via Brightspace. Further rules regarding the progress test are included in the ECTG Examination Requirements. Students reflect on their Progress Test results in the coaching session at the end of the academic year.

Rules, establishing results, and communication: The examiner determines the results. For the standard, see: <https://ivtg.nl> and the ECTG Examination Requirements. The procedures for announcing the results will be announced on the website (<https://ivtg.nl>). At the end of the academic year, a combination of the results of the progress tests is used to assess whether the Knowledge Development course unit of that year has been achieved.

Resit and catch-up: Failure to pass the progress test does not prevent the student from moving on to the next academic year, provided the student has obtained sufficient credits. Each progress test serves as a resit opportunity for previous progress tests that were assessed as insufficient.

Archiving: Archiving takes place in accordance with the legal frameworks concerning the retention periods of tests at the designated location.

Evaluation and action plan: The examiner writes a test report and sends it to the Director of Education and the Board of Examiners. Based on the test report and teaching evaluations, the examiner writes an action plan and discusses this with the Director of Education. The examiner will discuss the test report with the Board of Examiners if necessary. The ECTG approves the results, after which they are entered into Progress.

5. Responsibility for the quality of the assessment

5.1 Board of Examiners

The Board of Examiners is responsible for determining, in an objective and expert manner, whether individual students satisfy the conditions set out in the Teaching and Examination Regulations with regard to the knowledge, understanding, and skills required to gain a degree. The Board of Examiners is appointed by the dean. The Board of Examiners has the following tasks pursuant to Article 7.12b of the Higher Education and Research Act (WHW):

- ensuring the quality of the tests and exams
- establishing guidelines and instructions within the framework of the teaching and examination regulations
- granting an exemption from taking one or more examinations, and
- ensuring the quality of the organization and procedures for examinations and final assessments.

The Board of Examiners evaluates the implementation of the assessment annually and selects the points of attention for the coming academic year. The Board of Examiners reports annually on its activities in an annual report to the dean.

5.2 Examiners

The Board of Examiners appoints examiners to set examinations and determine results. Examiners have the following duties:

- drawing up the learning goals
- compiling, determining the cut-off point, administering, assessing and analysing tests, and determining and reporting on the results achieved
- providing information about testing to students
- reporting on the assessment of the course unit (assessment report) to the Director of Education and the Board of Examiners, and
- providing the requested information to the Board of Examiners.

5.3 Director of Education

The Director of Education is responsible for the quality of teaching, including testing. The Director of Education also ensures that the examiners are able to carry out their tasks.

Part B Pre-Master's Medicine

1. Learning outcomes and purpose of the programme

The learning outcomes of the Pre-Master's in Medicine (abbreviated PMG) are based on the Framework for Undergraduate Medical Education 2020 and derived from the Bachelor's degree programme G2020. The Pre-Master's degree in medicine (PMG) aims to provide students with enough medical knowledge and professional development in one year to prepare them sufficiently for the Master's degree in medicine. If this programme is completed with sufficient results, they will receive a certificate that gives access to the Master's degree. The assessment vision (H3.1) from Part A and Appendices 3a and 5 also applies to the PMG.

2. Structure of PMG

The programme largely follows the teaching of the Bachelor of Medicine programme. The learning outcomes are the same, with the Framework being leading and the assessment, learning material, and learning goals being comparable. In the PMG year, the complete programme of Causes of Diseases from the Bachelor's programme (academic years 1, 2, and 3) is covered in a condensed manner. The competency development courses from the regular Bachelor's degree programme within the four LCs are not followed but have been replaced by a 'Professional Development' programme in which aspects of the Professional Development course unit from G2010 and Competency Development from G2020 are taught.

Table 1: Courses and distribution of ECs PMG

Semester 1	Semester 2
PMG1 Causes of Diseases (23 ECs)	PMG2 Causes of Diseases (23 ECs)
PMG 3 Knowledge Development 1 (4 ECs)	
PMG4 Professional Development (10 ECs)	

PMG1 and PMG 2	Contain parts from Causes of Diseases from academic years 1, 2, and 3 of the Bachelor of Medicine
PMG 3	Interfaculty Progress Test 9 to 12. Equivalent to Bachelor of Medicine year 3.
PMG 4	Practical obligations Basic Life Support (BLS), Medical Communication (MC), and the one-week care clerkship or alternative assignment. Portfolio: reflection reports, reflection assignments, and evaluation of functioning in various educational activities such as the study supervision group (SBG), BLS, MC, and the care clerkship.

3. Test formats and characteristics

Table 2: Overview of courses and assessment formats

Course unit	Mode of assessment	Characteristics
PMG1 and PMG 2	Written examination	Examination consisting of four partial tests Multiple-choice test questions Closed-book test questions
PMG3 Knowledge Development	Written examination	Interfaculty progress test Digital multiple choice test according to the computerized adaptive testing (CAT) method. Taken four times a year
PMG4 Professional Development	Portfolio	There is a mix of test formats: - Assessment of Professional Conduct - Reflection reports - Progress meeting & final interview
	Responsibilities	Practical-related obligations

4. Protocols and rules for the implementation of PMG testing

4.1 Testing process for courses PMG1 and PMG2

Composition & structuring: When developing the Pre-Master's programme, it was determined which themes and learning goals of the G2020 Bachelor's degree programme are relevant for the Pre-Master's student. During the development of the programme, the cut-off method was established: a knowledge percentage of 60% and a Cohen cut-off with P99. The examination for the course unit comprises four partial tests. A test matrix has been drawn up for each partial test based on the material and the learning goals. This test matrix is used to include test questions from the regular Bachelor's tests. The question format of all partial tests is 100% multiple choice and consists of closed-book test questions. The examiner compiles the final partial test according to the test structuring guidelines (see Appendix 5) and uses questions that have already been reviewed by the test review panel. The material, learning goals, weighting, and cut-off points are available to students at the start of the course unit.

Testing: The partial tests will be taken at the designated location. The assessment time is included in the faculty's annual planning and the student timetable. Participation in all tests is mandatory. The UG protocol is followed during the test. Any irregularities will be reported to the designated persons or authorities. The examiner is present during the test. They may be represented by a substitute appointed by the examiner.

Analysis: The examiner carries out the analysis, possibly in consultation with the lecturers involved.

Establishing results and feedback: At the end of the semester, the examiner determines the final mark for the course unit. The final mark for the course unit is calculated based on the marks obtained for both partial tests. All partial tests carry equal weight in determining the final mark. On average, a pass mark (≥ 5.50) must be achieved for the tests on the PMG 1 and 2 courses. The marks for partial tests and the final mark for the PMG1 and PMG2 courses will be communicated to the student. The examiner is responsible for ensuring that this is done in an orderly manner.

Evaluation and inspection: The student has the right to inspect. The examiner will submit any content-related ambiguities to a subject-matter expert lecturer.

Resit: Within the academic year, all partial PMG1 and PMG 2 tests that were not passed can be resat in order to complete the PMG 1 and 2 courses with an average pass (≥ 5.50).

Catching up: Students who have missed a partial test for a valid reason will be given the opportunity to catch up. These catch-up times are planned after the end of the semester. The result of the catch-up test is combined with the results of the other partial tests and used to calculate the final mark for the course unit. Students who have missed more than one partial test will be referred to the resits that take place after the end of the academic year.

Archiving: Archiving takes place in accordance with the legal frameworks concerning the retention periods of tests at the designated location. The ECTG approves the results, after which they are entered into Progress.

Evaluation and action plan: The examiner writes a test report and sends it to the Director of Education and the Board of Examiners. Based on the test report and teaching evaluations, the examiner writes an action plan and discusses it with the Director of Education. The examiner will discuss the test report with the Board of Examiners if necessary.

4.2 Testing process for courses PMG3

See Part A, paragraph 4.5 with the exception of the rules below.

Determination of final mark: A pass must be achieved on the written progress test, and the following conditions apply:

- on the third or fourth progress test at level 12,
- if the third progress test is taken at level 12, the fourth progress test must be passed at least at level 10 (retention of form).

Resit: If the attendance requirement has been met, but a pass has not been obtained, the next progress test will be considered as a resit option for the Knowledge Development B3 examination.

4.3 Testing process for courses PMG4

Composition & structuring: When structuring the PMG programme, the competencies for PMG4 were established. These are taken from the Framework. Based on this, the learning goals were then derived. The test formats are determined in advance.

Table 3: Overview of PMG4 key components

Practical obligations	Sufficient attendance at Basic Life Support and Medical Communication practicals. Attendance requirements for care clerkship
Portfolio	The student must submit the portfolio on time and in full. The following components are assessed in the portfolio: <ul style="list-style-type: none"> - Professional conduct Basic Life Support practical - Professional conduct Medical Communication practical - Professional conduct (optional) Care Clerkship - Professional conduct Study progress supervision groups semester 1.1 - Professional conduct Study progress supervision groups semester 1.2 - Reflection assignment Code of conduct and ethics - Reflection assignment Observational clerkship - Reflection assignment Peer feedback - Reflection assignment Conference report - Reflection assignment Thinking about professional behaviour - Interim reflection report
Progress meeting	<ul style="list-style-type: none"> - Halfway through semester 1.1, the student has a progress meeting with the SBG group coach. - In preparation, the student writes a reflective report in which they describe their development. To this end, they use the feedback given up to that point, the results achieved, and the development made within other parts of the training. - The SBG lecturer looks at the feedback given and the results of the other courses and discusses this with the student. - If the SBG lecturer decides that the student is not doing well, they will clearly indicate this and discuss it with the student. - In that case, the SBG lecturer agrees with the student that an Action Plan will have to be written.
Final interview	<ul style="list-style-type: none"> - In preparation for the final interview, the student writes a reflective report. - In the final interview at the end of the year, the SBG lecturer discusses the development with the student. The SBG lecturer and student discuss the student's marks, feedback, and reflection. - Insufficient marks are discussed further to clarify the causes and background. - If a Plan of Action was drawn up during the progress meeting, it will be examined whether the concerns have improved in the meantime.

Determination and feedback: The SBG lecturer provides assessment advice to the examiner PMG4 for all students, based on the conversation and the content of the portfolio ('no special details' or 'please discuss in the assessment committee'). In the latter case, the SBG lecturer will provide an explanation to the examiners. In addition to the examiners, the assessment committee also includes the PMG producer, the SBG lecturers, and the Director of Education. Professional development is completed with a pass/fail grade. The examiner will communicate the final result back to the student.

Resit: If a fail has been achieved for Professional Development, the examiner will determine a resit assignment in consultation with the assessment committee. The content of this assignment depends on the nature of the gap. The examiner will set a clear deadline for the student to complete this assignment.

Archiving: Archiving takes place in accordance with the legal frameworks concerning the retention periods of tests at the designated location.

Evaluation and action plan: The examiner writes a test report and sends it to the Director of Education and the Board of Examiners. Based on the test report and teaching evaluations, the examiner writes an action plan and discusses it with the Director of Education. The examiner will discuss the test report with the Board of Examiners if necessary. The ECTG approves the results, after which they are entered into Progress.

4.4 Final assessment Pre-Master's exam

A Pre-Master's student has passed the Pre-Master's programme if they:

- have achieved a satisfactory final mark for the courses PMG 1 and PMG 2
- meet the requirements of Knowledge Development 3 of the Bachelor's degree programme in Medicine as described above (PMG3 Knowledge Development)
- the PMG4 course unit has been completed with a satisfactory result
- all attendance requirements have been met.

4.5 Completion of the programme and eligibility for the Master's degree programme

The Pre-Master's programme can only be completed with a pass if all courses have been completed with a pass grade within two years after the start of the PMG programme. The programme issues a certificate confirming that the programme has been successfully completed and that the student is admissible to the Master's degree in Medicine at the University of Groningen.

(NB: The student must take into account that according to the OER University of Groningen Master's Degree in Medicine, the Master's degree programme must be started within one year of completing the PMG. The Admissions Committee for Medicine is responsible for admission to the Master's degree programme.)

Appendices

Appendix 1 Matrix Framework Knowledge Domains and G2020 Bachelor

	FRAMEWORK Chapter 4 Knowledge domain, 4.2 knowledge aspects	CoD 1.1, 1.2, 1.3	CoD 1.4, 1.5, 1.6	CoD 2.1, 2.2, 2.3	CoD 2.4, 2.5, 2.6	CoD 3.1, 3.2, 3.3	CoD 3.4, 3.5	CO
	A newly graduated doctor has an understanding of							
1	the philosophical, ethical, and historical foundations of medical practice.	x	x		x			x
2	the structural and physiological properties, and the interrelationships between them, of the major biomolecules and molecular systems in the cells, tissues, organs, and organ systems of the human body.	x	x	x	x	x	x	
3	the human organism's striving for homeostasis at every level, adapting to circumstances and communicating with the environment.	x	x	x	x	x	x	
4	the response to damage or threat to structural or functional integrity, at a molecular, cellular, tissue, organ, and organismal level.	x	x	x	x	x	x	
5	the origin, development, growth, sexual maturation, ageing, and death of an organism	x	x	x	x	x	x	
6	relationships between genetic information and the associated phenotype. The doctor knows and understands the influence of non-genetic factors on this phenotype.	x	x	x	x	x		
7	the physiological and pathological relationships between host and microorganisms.	x		x	x			
8	the influence of external factors on maintaining or promoting health and their role in the development of diseases.	x		x	x	x		x
9	mechanisms to influence behaviour to promote health.	x	x		x	x		x
10	the main aspects of aetiology, pathogenesis, and pathophysiology of neoplasia at a cellular, tissue, organ, and patient level, and systemic effects.	x		x				
11	commonly used research methods and measurement methods relating to the structure and function of molecules, cells, tissues, organs, and organisms.	x		x			x	x

12	scientific basis of therapeutic action.	x	x	x	x	x	x	
13	psychological and socio-economic factors that influence normal human development.		x		x	x		x
14	psychological and sociological mechanisms in relation to illness and health and quality of life		x			x		x
15	mechanisms underlying the development and maintenance of psychological complaints (and insufficiently explained physical symptoms) and disorders, in conjunction with the socio-societal context of the individual.					x		
16	the construction of society in a globalizing world.	x			x	x		x
17	the organization, quality legal regulations, and financing of healthcare in the Netherlands.	x	x	x	x	x	x	x
18	the practice of scientific research.						x	x
19	the main research designs and statistical methods and measures of health and disease							x
20	the most important aspects of quality of care and the different perspectives from which these can be approached (patient, physician, insurer, government, etc.)			x				
21	the need for and opportunities for innovation in healthcare.						x	x
22	Theoretical backgrounds of the doctor-patient relationship, health literacy, and communication.							x
23	different dimensions that make up the concept of professional behaviour.	x	x	x	x	x	x	x
24	the core of medical professional conduct as expressed in the Dutch medical oath and the rules of professional secrecy.							x

Appendix 2 Matrix Framework Issues and G2020 Bachelor

FRAMEWORK Chapter 5			
<i>I. Issues related to disorders of functions and/or anatomical properties of the human body</i>			
		G2020 Bachelor	
A	Disorders of functions of the human body		
	mental functions	X	
	sensory functions	X	
	voice and speech	X	
	cardiovascular system	X	
	haematological system	X	
	immune system	X	
	respiratory system	X	
	digestive system	X	
	metabolic system	X	
	hormonal system	X	
	urogenital system	X	
	reproductive functions	X	
	movement system	X	
	skin and appendages	X	
B	Disorders of anatomical properties of the human body		
	nervous system	X	
	eye and ear	X	
	nose, mouth, and throat	X	
	airways	X	
	heart and blood vessels	X	
	lymphatic system, spleen, and bone marrow	X	
	salivary glands, oesophagus, stomach, intestines, liver, gallbladder, and pancreas	X	

	endocrine glands	X	
	urogenital system	X	
	musculoskeletal system	X	
	skin and appendages	X	
C	Common, frequently occurring symptoms such as fatigue, weight loss, weight gain, fever, pain, swelling, insomnia	X	
E	Issues in certain phases of life such as growth and development disorders, contraception, disorders in reproductive functions, pregnancy (including unwanted pregnancy), menopause and menopausal symptoms, ageing and ageing-related diseases, dying	X	
<i>II. Issues related to activity restrictions & problems with participation</i>			
A	General and health literacy		
	Learning and applying knowledge	X	
	General duties and requirements	X	
	Communication	X	
B.	Activities of daily living		
	Mobility	X	
	Self-care	X	
	Household tasks	X	
C.	Social environment and context		
	Interpersonal interactions and relationships	x	
	Important areas of life	x	
	Social, civic, and community life	x	
<i>III. Issues related to personal and external factors</i>			
A.	Prevention		
	Universal prevention, individual and collective	X	
	Selective prevention, individual and collective	X	
	Indicated prevention	X	

	Healthcare-related prevention	X	
B.	Violence/abuse in relationships between people, including		
	Domestic violence		
	Child abuse	X	
	Elderly abuse		
C.	Deviating healthcare consumption		
	Overconsumption	X	
	Underconsumption	X	
D.	Diversity	X	
<i>IV. Issues related to specific perspectives and contexts</i>			
A.	Emergency triage	X	
B.	Basic care for trauma patients	X	
C.	Sports injuries	X	
D.	Abnormal findings in people without symptoms		
E.	Multimorbidity	X	
F.	Frailty	X	
G.	Polypharmacy	X	
H.	Addiction	X	
I.	Chronic care, Rehabilitation care, Nursing home/ institutional care	X	
J.	Appropriate care: Advance care planning Cost awareness Identifying undertreatment and overtreatment	X	
K.	Palliative care	X	
L.	Supporting end-of-life	X	
M.	Moral and ethical questions	X	

Appendix 3a Bachelor Competencies Framework

<p>1. MEDICAL EXPERTISE (MED)</p> <p>The doctor integrates medical expertise with all other competencies from the CanMEDS competency domains. The doctor applies medical knowledge and clinical skills and acts based on professional values to provide high-quality, effective, efficient, and safe patient or population-oriented preventive care.</p>	
<p><i>Bachelor</i> <i>The fresh graduate is able to:</i></p>	
MED 1	Analyse simple health issues using relevant biopsychosocial knowledge and scientific sources in the simulated practice or simple practice setting of direct or indirect patient care
MED 2	<p>Perform a consultation with an individual patient in an effective, efficient, ethically responsible, and patient-oriented manner in a simulated professional situation or simple practice setting</p> <p>2.1 perform a simple consultation using relevant biopsychosocial knowledge</p> <p>2.2 take a complete medical history</p> <p>2.3 perform a physical examination on a patient or simulation patient in practice situations selected based on level and complexity</p> <p>2.4 make a differential diagnosis of a single problem</p> <p>2.5 provide a summary of a patient case in clear terms</p> <p>2.6 investigate and formulate possible treatment goals for simple health issues</p> <p>2.7 explain a treatment plan</p> <p>2.7.1 discuss this in plain language</p> <p>2.7.2 check whether the patient has understood everything</p> <p>2.7.3 structure the conversation adequately</p>
MED 3	<p>Determine in a simulated professional situation or simple practice setting for simple problems which tests can be used for diagnostic, preventive and/or therapeutic policy</p> <p>3.1 give basic first aid, including resuscitation (in Causes of Diseases)</p> <p>3.2 draw up a draft plan in a simulated professional situation or simple practice setting for a treatment or</p> <p>3.3 procedure for simple health problems</p>
MED 4	<p>Work safely and professionally in educational situations</p> <p>4.1 put the patient and their safety at the centre of the medical consultation</p> <p>4.2 apply the principles of safe working in healthcare (in Causes of Disease)</p> <p>4.3 reflect on their own actions and ask for feedback on them</p> <p>4.4 work together effectively</p>
<p>2. COMMUNICATION (COM)</p> <p>The doctor establishes and maintains an effective and empathetic relationship with patients, their relatives and healthcare and other professionals in order to provide essential information that is needed to collect and share information for good care and preventive care and to provide good supervision.</p>	
<p><i>Bachelor</i> <i>The fresh graduate is able to:</i></p>	
COM 1	<p>Maintain patient contact in a simulated professional situation or simple practice setting based on mutual understanding, empathy, and trust, and in doing so</p> <p>1.1 communicate empathetically and respectfully, both verbally and non-verbally</p> <p>1.2 recognize contextual factors in communication</p>

	1.3 Recognize differences of opinion and emotionally charged conversations and experiment with behavioural alternatives to deal with them (under the lecturer's supervision)
COM 2	Collect and analyse relevant biopsychosocial information about a medical problem in a simulated professional situation or simple practice setting and 2.1 clarify underlying care needs and preferences by using person-centred medical history questions
COM 3	Involve patients and their loved ones in a simulated professional situation or simple practice setting in drawing up treatment plans that match their wishes and goals, and in doing so 3.1 (for a simple problem) discuss the patient's wishes and goals and take contextual factors into account
COM 4	Adequately document medical information in a simulated professional situation or simple practice setting
3. COLLABORATION (SAM)	
The doctor works effectively and efficiently with healthcare and other professionals and patients and their relatives to provide safe, high-quality care or preventive care in which the patient is the main focus.	
<i>Bachelor</i> The fresh graduate is able to:	
SAM1	Work together effectively in educational situations 1.1 build and maintain a relationship 1.2 collaborate with other students and healthcare professionals 1.3 conduct joint decision-making discussions under supervision in simulated professional situations or simple practice settings that do justice to the patient's preferences, goals, and values
SAM2	Maintain good relationships in educational situations and simulated professional situations or in a simple, practical setting by showing understanding for each other and resolving disagreements and conflicts 2.1 treating each other with respect 2.2 asking for help to develop good collaboration skills
SAM 3	Adequately transfer care or other tasks in simulated professional situations or simple practice settings to ensure continuity and safety 3.1 be able to provide an oral or written handover
4. LEADERSHIP (LEI)	
The doctor acts from a perspective of care and also takes responsibility for their own personal development on the one hand and professional development on the other. The doctor reflects and demonstrates personal leadership with regard to their own development. The doctor works with others to ensure a high-quality and efficient health care system, optimal care, and continuous professional development of themselves and colleagues.	
<i>Bachelor</i> The fresh graduate is able to:	
LEI1	Adopt a learning attitude and develop personal leadership 1.1 adopt a learning attitude to develop self-reflection and self-insight 1.2 set priorities in study and private life in order to maintain the balance to promote one's own sustainable employability
LEI2	Take responsibility for developing into a medical professional 2.1 reflect on their own professional development 2.2 collaborate with colleagues 2.3 give and ask for feedback in a safe way and discuss important matters with each other

LEI3	Contribute to optimal care in simulated professional situations or simple practice settings, and in doing so 3.1 work properly with relevant information technology
LEI4	Have overall knowledge of available resources for healthcare financing
5. MANAGEMENT IN SOCIAL CONTEXT	
The doctor uses their knowledge and expertise to improve the health and well-being of individuals, the population, and public health as a whole, taking the resources available into consideration.	
<i>Bachelor</i> <i>The fresh graduate is able to:</i>	
MAH1	Identify aspects of disease prevention and appropriate patient care in a simulated professional situation or simple practice setting, which do justice to the needs of the individual patient in their context 1.1 discuss health promotion and disease prevention with patients 1.2 determine which determinants of health and disease contribute to health and perceived health
MAH2	Identify health needs in a patient group or population in a simulated occupational situation or simple practice setting and thereby 2.1 identify determinants of health and disease 2.2 identify populations at risk
MAH3	In educational situations, form an opinion about social themes that are being discussed
6. SCIENTIFIC PRACTICE (WET)	
As an academic, the doctor contributes to the application, dissemination, translation, and expansion of knowledge in practice by continuing to learn throughout life, training others, providing evidence to evaluate and contribute to scientific research.	
<i>Bachelor</i> <i>The fresh graduate is able to:</i>	
WET1	Transfer acquired knowledge and skills to colleagues 1.1 contribute to a safe learning environment 1.2 provide a simple learning activity 1.3 provide feedback in a safe way 1.4 constructively evaluate educational activities to improve education
WET2	Apply the best available evidence in a simulated professional situation or simple practice setting 2.1 recognize that there may be clinical uncertainty 2.2 find, select, and correctly apply adequate protocols and guidelines in a simulated professional situation 2.3 critically examine research data and research literature
WET3	Participate in medical, scientific research under supervision 3.1 formulate a good problem statement under supervision and choose an appropriate method to answer a hypothesis 3.2 recognize the ethical principles for research 3.3 contribute to ongoing scientific research under supervision 3.3.1 carry out and analyse a sub-study under supervision 3.3.2. report on this and present it to professionals

7. PROFESSIONALISM (PROF) The doctor is committed to the health and well-being of both individual patients and groups from the population through ethically responsible practice that complies with current standards of conduct and regulations, by taking care of their own personal health and well-being and by working well with other healthcare professionals.	
<i>Bachelor</i> <i>The fresh graduate is able to:</i>	
PROF1	Continue to develop by adopting a learning attitude 1.1 set learning goals and act on them 1.2 ask for feedback on a regular basis and reflect on their own actions 1.3 actively work towards good collaboration in teams
PROF2	Conduct themselves in contact with patients and colleagues in accordance with the ethical values and standards of the medical profession 2.1 behave in an appropriately professional manner 2.2 handle medical information confidentially
PROF3	Adhere to the legal frameworks and requested professional responsibilities in simulated professional situations or simple, practical settings, and in doing so 3.1 practice under supervision 3.2 recognize unprofessional behaviour and discuss this with the supervisor 3.3 apply intervention under supervision
PROF4	Take care of their own health and well-being in light of the challenges of studies and future professional practice 4.1 reflect on their own well-being 4.2 adopt a learning attitude when it comes to good self-care 4.3 maintain a balance between study and private life

Appendix 3b Matrix Bachelor Competencies and G2020 Bachelor

Explanation of the table below

- Due to the manageability, the competencies related to *reflection* in the programme are included in the competence domain Professionalism
- For the sake of manageability, the competencies related to *feedback* in the programme are included in the competency domain Leadership
- In a number of Healthy Ageing assignments, there is a major emphasis on *Management in Social Context*, which is why it was decided to place the learning goals in this competency domain instead of *Medical Expertise*.
- These choices were also made based on the principle that there is a limited number of learning goals per course unit.
- It is possible that changes will be made after the assessment plan has been established.

Competency domain	Total Ba 1to3	Year 1										Year 2										Year 3											
		MC1.1	MC 1.2	PO1.1	PO1.2	HA1.1.2	HA1.2.3	HA1.2.4	WV 1.1	WV internship	Tutor 1.1	Tutor 1.2	MC2.1	MC 2.2	PO2.1	PO2.2	HA2.1.5	HA2.1.6	HA2.2.7	HA2.2.8	WV 2.1	WV 2.2	Tutor 2.1	Tutor2.2	MC3.1	PO3.1	PO3.2	HA3.1.9	HA3.1.10	WV 3.1	WV 3.1	Tutor 3.1	
Medical expertise	MED1	2																X	X														
	MED2 ⁸	4															X	X							X							X	
	MED3 ⁹	1				X																											
	MED4	1																							X								
Communication	COM1	6	X	X		X						X	X											X									
	COM2	2				X						X																					
	COM3	2	X									X																					
	COM4	2						X				X																					
Collaboration	SAM1	23	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X			X	X	X			X	X		X		
	SAM2	23	X	X	X	X	X	X	X	X	X	X		X	X	X	X	X	X	X			X	X	X			X	X		X		
	SAM3	3						X		X			X																				

⁸ Except for the 'physical examination' part

⁹ Before starting the care clerkship in year 1, students are required to follow BLS training (including certificate)

Competency domain	Scientific Training			Leadership			Management in Social Context			Professionalism				
	WE11	WE12	WE13	LE11	LE12	LE13	LE14	MAH1	MAH2	MAH3	PROF1	PROF2	PROF3	PROF4
Total Ba 1 to 3	5	5	5	1	9	2	1	6	9	8	10	23	4	2
MC1.1								X	X		X	X		
MC 1.2									X			X		
PO1.1					X					X	X	X		
PO1.2					X						X	X	X	
HA1.12	X	X						X	X	X	X			
HA1.2 3		X						X	X	X	X			
HA1.2 4		X						X	X	X	X			
WV 1.1	X	X				X					X			
WV internship 1.2	X	X	X			X					X			
Tutor 1.1					X						X			
Tutor 1.2					X						X			
MC2.1											X			
MC 2.2											X			
PO2.1					X				X	X	X	X	X	
PO2.2					X				X	X	X	X	X	
HA2.1 5		X							X		X			
HA2.1 6								X	X		X			
HA2.2 7			X					X			X			
HA2.2 8			X						X		X			
WV 2.1														
WV 2.1														
Tutor 2.1					X						X			
Tutor2.2					X						X			
MC3.1								X	X		X			
PO3.1							X							
PO3.2														
HA3.1 9		X							X		X			
HA3.1 10							X	X			X	X		
WV 3.1														
WV 3.2			X								X			
Tutor 3.1											X	X	X	X

Appendix 4 Themes Courses Causes of Diseases

The courses Causes of Diseases consist of the following themes:

1.1	Development
1.2	Endocrine regulation Blood & Neoplasm
1.3	Infection & Resistance 1 Infection & Resistance 2
1.4	Ischemia
1.5	Injury
1.6	Degeneration Disease & Health
2.1	Systemic diseases
2.2	Shortness of breath Neoplasms 1
2.3	MDL Neoplasms 2
2.4	Endocrinology Sexology
2.5	Reproduction Problems in the pelvis
2.6	Sick child Growth & Development
3.1	Nervous system 1 & senses Nervous system 2
3.2	Nervous system 3
3.3	Psychiatry 1 Psychiatry 2
3.4	Acute Medicine 1
3.5	Acute Medicine 2

Appendix 5 Testing qualitative requirements

To ensure the quality of assessments, each summative assessment must meet the following criteria (UG Assessment Policy 2021-2026):

Validity

1. The test is related to the learning goals to be achieved.
2. There is a test design, for example a test matrix.
3. The test sufficiently measures the stated learning goals.
4. The test is a reflection of the material to be studied, both in terms of content and level.
5. The test is a reflection of the material covered in lessons, textbooks, and other study material.
6. The four-eyes principle was applied in the development of the test.

Reliability

7. The test contains sufficient components to obtain a reliable picture of the student's competence.
8. The question is formulated clearly and unambiguously.
9. The assessment criteria are clearly and unambiguously formulated.

Transparency

10. At the beginning of the course, it is made sufficiently clear how the assessment will be conducted.
11. The assessment criteria are clear to the students.
12. The way in which a mark is calculated is clear to students.
13. The minimum performance required to pass the test successfully is clear to the students.
14. The performance expected on the test is sufficiently practised during the course unit.

Workability/ efficiency

15. The test is a workable instrument for students in terms of the available study and test time.
16. The test is a workable instrument for lecturers in terms of the available teaching hours.