

2013 Curriculum for the Master Programme in Companion Animal Clinical Science at the Faculty of Health and Medical Sciences, University of Copenhagen

This revised curriculum comes into force on 1 September 2022 and shall apply in relation to all students admitted to the programme.

The curriculum was approved by the Dean in June 2013 with changes approved on 1 February 2014, 12 March 2019, 10 March 2020, March 2021, March 2022, and March 2023

This subject-specific curriculum, the course descriptions at <https://kurser.ku.dk/> and the general curriculum provisions together comprise the curriculum for the Master Programme in Companion Animal Clinical Science.

Part 1 Objectives and Competence Profile

§ 1 Objectives

The objective of the Master Programme in Companion Animal Clinical Science (Master i klinisk familiedyrvidenskab) is to give veterinarians with at least 2 years of practical professional experience from companion animal practice a scientifically based continuing education in applied and advanced veterinary methodology, para clinical skills and clinical decision making. The student will attain specialized knowledge, skills, and competences within an elective companion animal specialization.

1.2 Successful completion of the programme gives the right to one of the following titles, depending on the completed specialization track:

- Master of Companion Animal Clinical Science (Internal Medicine) and the Danish title master i klinisk familiedyrvidenskab (Intern medicin)
- Master of Companion Animal Clinical Science (Surgery) and the Danish title master i klinisk familiedyrvidenskab (Kirurgi)
- Master of Companion Animal Clinical Science (Cardiology) and the Danish title master i klinisk familiedyrvidenskab (Kardiologi)
- Master of Companion Animal Clinical Science (Neurology) and the Danish title master i klinisk familiedyrvidenskab (Neurologi)
- Master of Companion Animal Clinical Science (Oncology) and the Danish title master i klinisk familiedyrvidenskab (Onkologi)
- Master of Companion Animal Clinical Science (Dermatology) and the Danish title master i klinisk familiedyrvidenskab (Dermatologi)
- Master of Companion Animal Clinical Science (Ophthalmology) and the Danish title master i klinisk familiedyrvidenskab (Oftalmologi)
- Master of Companion Animal Clinical Science (Odontology) and the Danish title master i klinisk familiedyrvidenskab (Odontologi)

1.3 The degree is worth 60 ECTS credits.

1.4 The programme falls within the scope of the Study Board for the Professional Master's Programmes.

1.5 The programme falls within the scope of the corps of external examiners for veterinary medicine.

§ 2 Admission requirements

A maximum of 30 students can be admitted to the programme.

It is a requirement for admission that the applicant:

- holds a candidate degree in Veterinary Medicine/Doctor of Veterinary Medicine (DVM)
- Has at least two years of relevant work experience in Companion Animal Practice after having completed the qualifying course of study. Qualifying working experience is primarily experience as veterinary practitioner

2.2 Admission to a professional master's programme requires a mastery of English corresponding to level B English at Danish upper secondary level. Applicants must document proficiency in English as stated in the programme webpage.

2.3 The courses offered under the programme are offered as single courses. The same admission requirements apply to students taking single courses. If the number of applicants for a given course exceeds the number of seats, priority is given to students enrolled in the full master programme.

2.4 The admission committee may grant exemptions from the provisions of 2.1 by exceptional circumstances

§ 3 Competence profile

On completion of the programme, the graduate will be able to approach and address complex companion animal health and disease problems in a highly reflective and structured problem-oriented fashion based on analysis of collected data and information from the medical literature, resulting in clinical decision making and planning and execution of specialized diagnostic work up, procedures and therapeutic strategies at an advanced level. Furthermore, to communicate professional and specialization related topics and solutions to new issues to specialist and non-specialist colleagues, as well as to lay people. The graduate will be able to participate in cross disciplinary interaction, networks, and collaboration at a highly qualified level within the elected area of specialization. The graduate will have the foundation to continuously develop professionally within the area of specialization.

Knowledge:

The graduate will be able to:

- Define, identify, and discuss veterinary methodology and para clinical tools in systematized reflective clinical decision making in companion animal clinical practice specifically within the elected specialization
- Explain, reflect about, and demonstrate overview of complex clinical decision making, patient therapy and management at a specialized level
- List, classify, and demonstrate critical reflection on existing and new approaches to patient diagnosis, therapy, management, and client education in a specialty practice situation.

Skills:

Within the area of specialization the graduate will be able to:

- Apply the quantitative and qualitative methodologies and tools as well as master relevant skills.
- Interpret, assess, and reflect on collected patient data in order to identify/localize the cause of disease, make clinical decisions, arrive at a diagnosis, apply, and integrate evidence based scientific approaches to plan and administer further diagnostics, patient therapy and management

- Continuously seek out, reflect on, and apply new evidence-based methods and solution models
- Communicate and discuss academic issues and solution models with both peers and non-specialists at an advanced level and across disciplines within companion animal practice
- Communicate effectively in writing and pass on results to relevant parties

Competences:

The graduate will be able to:

- Evaluate and manage companion animal diseases within the chosen specialization, which may necessitate novel solutions and approaches identified from current medical literature or other resources.
- Work independently, take responsibility for, predict, prognosticate, and make decisions within the chosen specialization.
- Collaborate constructively within and between specialists/professionals and lay persons involved in companion animal patient management.
- Make ethical considerations regarding diagnostic methods and therapies and place these into perspective.
- Independently evaluate and structure own learning processes and continuously obtain new knowledge at a specialty level within the chosen specialization

Part 2 Modules, instruction, maximum duration of study

§ 4 Modules

The modular structure of the programme is designed to provide students with overall academic qualifications within a prescribed timeframe, which is defined in terms of ECTS points. All courses in the programme are subject to a modular structure.

§ 5 Maximum duration of study

Students must complete the programme no more than six years following commencement 5.2. The Study Board may grant exemptions from the six-year time limit under extraordinary circumstances.

Part 3 Study and exam activities

§ 6 Study and exam activities

Outline of compulsory courses:

Course title and code	Exam title and code	ECTS
Veterinary Methodology and Paraclinical Skills SCAM13001U	Veterinary Methodology and Paraclinical Skills SCAM13001E	7.5
Companion Animal Internal Medicine and Speciality Cases, Systematic Diagnostic Decision Making SCAM13002U	Companion Animal Internal Medicine and Speciality Cases, Systematic Diagnostic Decision Making SCAM13002E	7.5
Companion Animal Surgery – Good Surgical Practice	Companion Animal Surgery – Good Surgical Practise	7.5

SCAM13003U	SCAM13003E	
Dedicated Companion Animal Clinical Practice SCAM13004U	Dedicated Companion Animal Clinical Practice SCAM13004E	7.5

Outline of elective courses:

Specialization Track title	Course title and code	Exam title and code	ECTS
Companion Animal Internal Medicine	Diagnosis and Treatment of Patients with Endocrine and Urological Diseases SCAM13006U	Diagnosis and Treatment of Patients with Endocrine and Urological Diseases SCAM13006E	6
Companion Animal Internal Medicine	Diagnosis and Treatment of Patients with Gastrointestinal and Respiratory Diseases SCAM13005U	Diagnosis and Treatment of Patients with Gastrointestinal and Respiratory Diseases SCAM13005E	6
Companion Animal Internal Medicine	Diagnosis and Treatment of Patients with Haematological, Infectious and Critical Medical Diseases SCAM13007U	Diagnosis and Treatment of Patients with Haematological, Infectious and Critical Medical Diseases SCAM13007E	6
Companion Animal Surgery	Soft Tissue Surgery SCAM13008U	Soft Tissue Surgery SCAM13008E	6
Companion Animal Surgery	Orthopedic Surgery SCAM13009U	Orthopedic Surgery SCAM13009E	6
Companion Animal Surgery	Cancer Surgery SCAM13010U	Cancer Surgery SCAM13010E	6
Companion Animal Cardiology	Applied Clinical Cardiology SCAM13024U	Applied Clinical Cardiology SCAM13024E	6
Companion Animal Cardiology	Diagnostic Cardiology SCAM13011U	Diagnostic Cardiology SCAM13011E	6
Companion Animal Cardiology	Advanced Clinical Cardiology SCAM13012U	Advanced Clinical Cardiology SCAM13012E	6
Companion Animal Neurology	Applied Clinical Neurology SCAM13026U	Applied Clinical Neurology SCAM13026E	6
Companion Animal Neurology	Advanced Diagnostic Clinical Neurology SCAM13027U	Advanced Diagnostic Clinical Neurology SCAM13027E	6
Companion Animal Neurology	Neurosurgery and Neuro-ophthalmology	Neurosurgery and Neuro-ophthalmology SCAM13015U	6
Companion Animal Oncology	Medical Oncology I SCAM13019U	Medical Oncology I SCAM13019E	6
Companion Animal Oncology	Medical Oncology II SCAM13020U	Medical Oncology II SCAM13020E	6
Companion Animal Oncology	Cancer Surgery SCAM13010U	Cancer Surgery SCAM13010E	6

Companion Animal Dermatology	Applied Clinical Dermatology SCAM13032U	Applied Clinical Dermatology SCAM13032E	
Companion Animal Dermatology	Diagnostic Clinical Dermatology SCAM13033U	Diagnostic Clinical Dermatology SCAM13033E	6
Companion Animal Dermatology	Advanced Clinical Dermatology	Advanced Clinical Dermatology	6
Companion Animal Ophthalmology	Basic Companion Animal Ophthalmology SCAM13029U	Basic Companion Animal Ophthalmology SCAM13029E	6
Companion Animal Ophthalmology	Advanced Companion Animal Ophthalmology SCAM13030U	Advanced Companion Animal Ophthalmology SCAM13030E	6
Companion Animal Ophthalmology	Companion Animal Ocular Surgery SCAM13031U	Companion Animal Ocular Surgery SCAM13031E	6
Companion Animal Odontology	Applied Clinical Companion Animal Odontology	Applied Clinical Companion Animal Odontology	6
Companion Animal Odontology	Advanced Clinical Companion Animal Odontology	Advanced Clinical Companion Animal Odontology	6
Companion Animal Odontology	Companion Animal Dental, Maxillofacial and Oral Surgery	Companion Animal Dental, Maxillofacial and Oral Surgery	6

Outline of Master's Project

Course title and code	Exam title and code	ECTS
Master's Project SCAM13025U	Master's Project SCAM13025E	12

6.2 The student must pass all compulsory courses before commencing on the elective courses.

6.3 The student must have completed all compulsory and elective courses and passed all exams before the master's project oral exam.

6.4 The sequence of the compulsory courses and the elective courses can be changed, unless otherwise stated in the course curriculum. Changes in the sequence of the courses are always handled individually and must always be approved by the Study Board.

6.5 The Study Board may grant exemptions from the provisions 6.2 by exceptional circumstances

6.6 The course descriptions at <https://kurser.ku.dk/> specify learning outcomes, contents, teaching and learning methods, prerequisites for participation, etc.

§ 7 Compulsory, constituent subject elements and elective elements

The programme consists of 42 ECTS credits from compulsory study and exam activities of which the master's project is worth 12 ECTS credits.

7.2 The programme consists of 18 ECTS credits from elective study and exam activities.

7.3 The programme's constituent subject elements are:

- All compulsory study and examination activities
- The Master's thesis
- Elective subjects

§ 8 Group exams

Written papers can be done in groups with other students if stipulated in the course descriptions at www.kurser.ku.dk

8.2 Group examinations can be done for groups of no more than four students, when stipulated in the course descriptions at www.kurser.ku.dk

8.3 Jointly written papers are permitted provided the contributions made by each member of the group can be identified. A separate and individual grade will be given to each student.

8.4 Oral examination on the basis of jointly written papers should be individual, and a student may only attend the examination of other students in the group if his or her examination has been held.

§ 9 Instruction and exam languages

Instruction is conducted in English, unless only Danish-speaking students and instructors are present.

9.2 All examinations are conducted in English. When specified in the course descriptions at www.kurser.ku.dk a student can choose to conduct an examination in Danish.

9.3 The master's project can be written in English or Danish.

§ 10 Elective elements

The master programme includes a compulsory element of elective courses worth a total of 18 ECTS credits.

10.2 The Study Board must ensure that master students have access to elective courses. These elective courses are described in the course descriptions at <https://kurser.ku.dk/> and announced no later than 1 May and 1 November in the preceding semester.

10.3 In February the Study Board generally approves the elective course descriptions for the following academic year.

10.4 The Study Board offers elective courses that are aligned with the objective of the master programme, see 1.1 on objectives above.

10.5 The elective courses consist of a chosen specialization track with 3 courses worth a total of 18 ECTS. All courses within the chosen specialization track must be followed.

§ 11 Master's project

Students must complete a master's project. The project must demonstrate the student's ability to formulate, analyze and process issues within a relevant, defined scientific subject in a qualified way.

11.2 The Master's project may be prepared individually or by groups of up to four students.

11.3 The project must be completed in accordance with the approved master's project agreement and comprise the equivalent of c. 10-15 pages A4 pages using 12-point Times Roman. The project must be accompanied by an abstract in English of no more than one A4 page. The abstract must summarize the project aim, the methods used, significant results/findings, a discussion if relevant, and a conclusion. The abstract will be included in the overall assessment of the Master's project.

11.4 When assessing master's project and other major written assignments, emphasis must, in addition to the academic content, also be placed on the student's spelling and writing skills.

11.5 The Master's project may also comprise a published or unpublished scientific article written or co-written by the student. If there is more than one author, each must submit a signed co-writer statement specifying the part or parts of the article for which he or she is responsible. The co-writer statement must reflect the relative contributions at the time of submission as a master's project. The student will be examined on the article in accordance with the rules applying to the master's project exam in general, as stipulated in the course description at www.kurser.ku.dk.

11.6 The Master's project is worth 12 ECTS credits.

11.7 Before commencing the master's project, a master's project agreement must be filled in. Submission of the master's project must be done via Digital Exam no later than the date stated in the master's project agreement. Late or none submission will count as an exam attempt, unless the student has been granted an extension of submission or in case of illness

Part 4 Specific provisions

§ 12 Transitional arrangements

Please find transitional arrangements [here](#)

§ 13 Prerequisites for establishing courses

In the event that a course attracts fewer than the number of students stipulated in the course descriptions at <https://kurser.ku.dk/>, The Faculty of Health and Medical Sciences reserves the right to cancel the course. However, if the course is sought after by students admitted at the master programme the faculty is obligated to run obligatory courses at least every second year.

Part 5 Concluding remarks

§ 14 Exemptions from these provisions

By exceptional circumstances, the Study Board may grant exemptions from any curriculum provisions within the sole remit of the Study Board.

§ 15 Date of commencement

This revised curriculum comes into force on 1 September 2023 and shall apply in relation to all students admitted at the programme.