



2022 Curriculum for the Master Programme in Companion Animal Clinical Science (Surgery) at the Faculty of Health and Medical Sciences, University of Copenhagen

This revised curriculum comes into force on 1 September 2023 and shall apply in relation to all students admitted to the Master of Companion Animal Clinical Science (Surgery) programme on or after that date.

The curriculum was approved by the Dean on 7 December 2021, with changes approved in March 2023

The 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 (Surgery) (Master i Klinisk Familiedyrsvidenskab (Kirurgi)) 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 companion animal surgery.

1.2 Successful completion of the programme gives the right to the following title:

- Master of Companion Animal Clinical Science (Surgery) and the Danish title Master i Klinisk Familiedyrsvidenskab, (Kirurgi)

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 at the Faculty of Health and Medical Sciences.

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

§ 2 Admission requirements

A maximum of 24 students can be admitted to the Master Programme in Companion Animal Clinical Science (Surgery).

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 in Companion Animal Clinical Science (Surgery).

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 surgery.

Knowledge:

Within the area of surgery 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 surgery 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:

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

- Evaluate and manage companion animal diseases within the 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 area of surgery.
- 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 area of surgery.

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 courses on the European Certificate – Companion Animal Surgery:

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 Surgery – Good Surgical practice (GSP) SCAM21001U	Companion Animal Surgery – Good Surgical practice (GSP) SCAM21001E	7.5
Companion Animal Surgery – Soft Tissue Surgery I SCAM21002U	Companion Animal Surgery – Soft Tissue Surgery I SCAM21002E	5
Companion Animal Surgery – Orthopaedics I – Basic Orthopaedic Principles SCAM21003U	Companion Animal Surgery – Orthopaedics I – Basic Orthopaedic Principles SCAM21003E	5
Companion Animal Surgery – Orthopaedics II - Large Joint Surgery SCAM21004U	Companion Animal Surgery – Orthopaedics II - Large Joint Surgery SCAM21004E	5

Outline of further specialization courses in the Master Programme in Companion Animal Clinical Science (Surgery)

Course title and code	Exam title and code	ECTS
Companion Animal Surgery – Soft Tissue Surgery II. Advanced Soft Tissue Surgery- Cancer Surgery	Companion Animal Surgery – Soft Tissue Surgery II. Advanced Soft Tissue Surgery- Cancer Surgery	6

SCAM21005U	SCAM21005E	
Companion Animal Surgery - Orthopaedics III- Advanced Fracture and Joint Management SCAM21006U	Companion Animal Surgery - Orthopaedics III- Advanced Fracture and Joint Management SCAM21006E	4
Companion Animal Surgery – Endoscopic Surgery – Arthroscopy, Laparoscopy, Thoracoscopy SCAM21007U	Companion Animal Surgery – Endoscopic Surgery – Arthroscopy, Laparoscopy, Thoracoscopy SCAM21007E	4
Companion Animal Surgery – Neurosurgery and TPLO SCAM21008U	Companion Animal Surgery – Neurosurgery and TPLO SCAM21008E	4

Master's Project

Master's Project SCAM13025U	Master's Project SCAM13025E	12
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6.2 When the student has passed the first 30 ECTS, the University of Copenhagen will issue an European Certificate – Companion Animal Surgery

6.3 The student must pass all compulsory courses on the Master Programme in Companion Animal Clinical Science (Surgery) before commencing on the advanced courses in the Master Programme in Companion Animal Clinical Science (Surgery).

6.4 The student may also choose to commence on one of the following other specialization tracks on the 2013 Curriculum for the Master Programme in Companion Animal Clinical Science: Companion Animal Oncology, Companion Animal Ophthalmology and Companion Animal Odontology.

6.5 The student must complete all basic and advanced courses and pass all exams before the master's project oral exam.

6.6 The students must follow the courses in the order listed above.

6.7 The Study Board may grant exemptions from the provisions 6.3 and 6.5 by exceptional circumstances

6.8 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 60 ECTS credits from compulsory study and exam activities of which the master's project is worth 12 ECTS credits.

7.2 The programme does not include elective study and exam activity.

7.3 The programme's constituent subject elements are:

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

§ 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 based on 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

There are no elective elements in the Surgery track at Master of Companion Animal Clinical Science.

10.2 The student may however choose to commence on one of the following three specialization tracks on the 2013 Curriculum for the Master Programme in Companion Animal Clinical Science: Companion Animal Oncology, Companion Animal Ophthalmology and Companion Animal Odontology.

§ 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 A4 pages using 12-point Times New 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 scientific question (PICO question)/hypothesis, the methods used, significant results/findings, a discussion, 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

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