

**THE DEPARTMENT OF**

**COMPARATIVE**

**BIOMEDICAL SCIENCES**

**of**

**THE SCHOOL OF VETERINARY MEDICINE**

**LOUISIANA STATE UNIVERSITY**

**GRADUATE PROGRAM GUIDELINES**

**A SUPPLEMENT TO THE LSU GRADUATE CATALOGUE**

**Intended for use by CBS Graduate Students and Faculty**  
**Prepared by the CBS Graduate Student Affairs Committee**

**2011**

# GRADUATE PROGRAM GUIDELINES

A Supplement to the LSU Graduate Catalogue  
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## **1. DEPARTMENTAL PHILOSOPHY ON GRADUATE EDUCATION**

The graduate program in Comparative Biomedical Sciences (CBS) offers an interdisciplinary approach to the study of the medical sciences as they apply to humans and animals. The goal of the program is to educate and prepare students for successful careers in academic, private industry or governmental environments. The School grants a Ph.D. or MS degree in Veterinary Medical Sciences, with concentrations in Cancer Research, Cell and Molecular Biology, Environmental Health Sciences, Anatomy, Physiology, Pharmacology or Toxicology. The research interests and direction of the CBS graduate faculty members are illustrated by the titles of the research projects currently supported through intra- and extramural funding, recent publications and interest areas given on the department website (see <http://www.vetmed.lsu.edu/van/>).

Graduate students who follow this option can focus on any aspect of the emphasis areas. Graduate study programs will be tailored to satisfy the interests of individual students by providing guidance for formal instruction and experimental investigations pertinent to the student's chosen area of study under the supervision and guidance of their mentor and advisor committee.

## **2. RESPONSIBILITIES IN THE GRADUATE PROGRAM**

Graduate education within the department is guided by the Graduate School, the CBS Graduate Student Affairs Committee (GSAC) and the departmental graduate faculty. The principal responsibility for an individual graduate student's study plan and research rests with that student, guided by the student's Graduate Research Mentor (GRM) and a responsible Graduate Advisory Committee (GAC). The role of each of these individuals and committees is defined below.

### **2.1 The CBS Graduate Student Affairs Committee (GSAC)**

The GSAC consists of tenured members of the CBS graduate faculty who act as the administrators for the CBS graduate program. The Department Head (DH) appoints this committee and its Chair from members of the CBS graduate faculty for a term established by the Department Head. The GSAC oversees the departmental graduate student admission process. The GSAC Chair, in conjunction with the members of the committee, acts as the contact for potential students, receives application packets from the Graduate School, and determines if the applicant 1) meets the minimum requirements for acceptance into the program and 2) has research interests consistent with the ongoing research in the department. The GSAC contacts the graduate faculty to review folders when available, then presents a summary of the potential graduate candidate's folder evaluation to the CBS faculty at the appropriate CBS graduate faculty meeting. In instances where the GSAC recognizes a particularly good fit, individual folders will be forwarded to specific individuals for review. The GSAC informs the Department Head of the faculty decision.

The majority of students admitted into the CBS Graduate Program have identified a Research Mentor prior to acceptance. In those instances when a student is admitted without an identified Research Mentor, the GSAC may act as a pre-mentor, advising the student on course work and research opportunities in the department. It is expected that all students will have identified their Research Mentor within one semester of admission.

The optimal time of completion for a Ph.D and a Master of Science are 4 years and 2 years, respectively. The GSAC will attempt to keep CBS graduate students and their mentors aware of graduate school milestones and necessary paperwork, such as those defined in Appendix A through D, thus assuring the student's timely progression through the program. In addition, the annual reviews of the student's progress prepared by the mentor and student will be filed with the GSAC. As the liaison with the Graduate School, the GSAC is responsible for implementation of changes in the graduate program as recommended.

The GSAC serves as the first mediator in resolution of disputes between students and faculty with regards to the CBS graduate program. In the event that the GSAC is unable to mediate an accord, the parties may take their grievance through the LSU chain of responsibility: CBS Department Head, SVM Associate Dean of Research, Dean of the Graduate School.

The other duties of the GSAC include:

1. Create, implement and update a plan of active recruitment of graduate students.
2. Evaluate and make recommendations regarding the nomination of departmental faculty for membership on the graduate faculty.
3. Coordinate advertisement of the CBS Department through annual reports, flyers and pamphlets, web-based opportunities to promote local, state, national and international recognition of the department and its faculty and graduates.
4. Research graduate stipends nationally to assure that stipends offered by the CBS Department are competitive and equitable, and make this information available to faculty preparing proposals.
5. Annually review the CBS Graduate Guidelines to determine if adjustments are necessary and present these changes to the graduate faculty.
6. Evaluate and make recommendations on admission of students under special circumstances.
7. Present an annual report on activities to the CBS faculty.

## 2.2 The Student

The student has the ultimate responsibility for the success of his or her graduate program. The student is responsible for initiating contacts in order to identify a Graduate Research Mentor and the members of his/her GAC whose academic interests and research programs coincide with the student's goals. He/she is responsible for writing the proposed plan of study and conducting the research necessary to successfully complete the degree requirements. Continued updating of the advisor and the GAC of the research progress is the responsibility of the student. The student shall organize a GAC meeting on an annual basis to discuss the student's progress. The student will meet with his/her Graduate Research Mentor so that an annual, written report on the student's degree progress can be prepared and submitted to the GSAC. A checklist of degree requirements which the student should follow is included in Appendix A through D. Time limits outlined by the LSU Graduate School must be followed.

### 2.3 The Graduate Research Mentor (Major Professor)

The Graduate Research Mentor must be a member of the CBS graduate faculty. He/she acts as mentor and is responsible for guiding the student through the graduate program on a daily basis. The Graduate Research Mentor advises the student on the membership on the student's GAC. The Graduate Research Mentor evaluates the student's research, chairs the student's graduate examinations, and acts as a liaison between the Graduate School and the student. It is the mentor's responsibility, with the cooperation of the student and the GAC, to identify and help rectify any coursework deficiencies pertinent to the student's degree. The Graduate Research Mentor shall provide a written report on the student's degree progress to the GSAC annually.

### 2.4 The Graduate Advisory Committee

The Graduate Research Mentor and the graduate student, together, should propose the membership of the GAC, which must be approved by the DH and the Dean of the Graduate School. The members may be from any department pertinent to the student's area of concentration. The specific make-up of the committee for PhD and MS degrees is outlined below.

The student and the GAC are responsible for formulating the study plan. The study plan for students should be based on the student's academic background, area of specialization, and recommendation of the GAC. The GAC is chaired by the student's Graduate Research Mentor and bears responsibility for planning the student's study plan, for monitoring the student's progress through that program, and for determining whether or not the student has met the standards of the department and the university for the degree. It is the obligation of each member of a GAC to insist on an adequately designed and rigorous program for the M.S. and Ph.D. student.

The membership of the GAC and the Study plan for students in both the M.S. and Ph.D. programs should be submitted to the Department Head and GA within the time frames outlined in Appendices B through E.

### 2.5. The Department Head

The Department Head, a full-member of graduate faculty, may serve as a Graduate Research Mentor and as a member of a GAC.

The specific responsibilities of the Department Head are as follows:

1. The Department Head will appoint the members and Chair of the GSAC from the CBS graduate faculty.
2. Based on information provided by the GSAC, The Department Head will inform students by letter of their acceptance into the department and of the awarding of stipends (if applicable).
3. The Department Head will keep the GSAC current on the availability of stipends.
4. The Department Head must approve the selection of the Graduate Research Mentor and membership of GAC.
5. The Department Head must approve all requests for part-time status in the M.S. and Ph.D programs.

6. In the event that the GSAC (as the first mediator in resolution of disputes between students and faculty) is unable to mediate an accord, the parties may take their grievance to CBS Department Head.

### **3. ACCEPTANCE INTO THE CBS GRADUATE PROGRAM**

Students must meet the acceptance criteria outlined by the LSU Graduate School and the following the CBS requirements:

GPA >3.0 with a GRE >1100 and, where appropriate, a score of >257 on the TOEFL exam.

The program also requires three letters of reference, authenticated transcripts and a written statement of professional goals.

A good “fit” of mentor and student is a departmental priority and thus strong consideration is given to the student’s written professional goals submitted with the application. Thus, it is important that this document state the student’s goals as clearly as possible. After evaluation of the application by the GSAC and discussion of the student’s application, the CBS graduate faculty will vote on admission of that student. The student will be informed of acceptance into the program in a timely manner. Students with D.V.M. or M.S. degrees would be expected to enter into a Ph.D. program. Students with B.A. or B.S. degree may be accepted into either an M.S. program or a Ph.D. program.

### **4. GRADUATE STIPENDS**

The CBS graduate program should be considered by the student to be a full-time effort. Every attempt will be made by the department, and should be made by the student, to obtain stipend support for the student’s graduate program; however, stipend support cannot be guaranteed by the department and students should be aware that acceptance in the CBS graduate program is independent of stipend support.

Part-time students are discouraged in both the M.S. and Ph.D. programs. Under special circumstances part-time students may be admitted into the program. This requires the student to have identified a Graduate Research Mentor and to obtain approval by the GSAC and the Department Head. Part-time students may not receive graduate stipends and must be self-supporting. The programs of part-time students require close supervision by the Graduate Research Mentor and GAC to ensure completion in a timely manner.

### **5. RESIDENCY PROGRAMS FOR VETERINARIANS**

The Louisiana State University School of Veterinary Medicine offers residency programs for veterinarians in a number of areas. Some of these programs, such as Pathology and Laboratory Animal Medicine, normally require students to complete a graduate program. Acceptance into the residency programs is separate from acceptance into the graduate program and potential residents must apply to and be accepted in a graduate program.

Residents are encouraged to explore all the options available through the School of Veterinary Medicine before choosing their graduate program. Following arrival at LSU, students should meet with and discuss the graduate opportunities available with each of the graduate faculty in CBS as well as the Department of Comparative Biological Sciences.

The faculty recognize that time demands on residents are different than on full-time graduate students and that the time line must be adjusted accordingly. Appendix C and D outline guidelines for students in combined Resident-M.S. and Resident-Ph.D. programs, respectively.

## **6. THE CBS GRADUATE PROGRAM CORE REQUIREMENTS**

Graduate students will receive a degree in Veterinary Medical Sciences through the Department of Comparative Biomedical Sciences. The departmental requirements for graduation are as follows:

1. The Basic Core Courses:

2. Required Courses: Students in CBS are required to take the following courses:

A. CBS 7108 Critical Review of the Literature and Data Presentation (3 credits)

B. VMED 7004 Introduction to Research (2 credits)

C. CBS 7104 Biomedical Cell and Molecular Biology (3 credits)

D. Statistics: at least three credit hours of experimental statistics at the 7000 level

3. Minor in CBS

Students in other departments who declare a minor in the Veterinary Medical Sciences CBS option will be required to take 9 credits of CBS courses, 7002 or above.

## **7. MASTER OF SCIENCE DEGREE**

The M.S. program in CBS is designed to further develop the scientific knowledge and problem solving abilities of the student. In this degree program students expand their knowledge of the department's emphasis areas and related sciences through advanced courses and seminars, while learning to apply the scientific method to the study of a specific research problem. A hypothesis-based thesis on the student's original research is required.

### 7.1. Graduate Advisory Committee (GAC)

The GAC for the degree of Master of Science consists of a minimum of three faculty members, one of whom must be a full member of the graduate faculty. At least one member of the committee must be CBS faculty. Students are encouraged to add a GAC member from outside CBS when such an individual would add expertise or resources necessary for the student's research. The Graduate Research Mentor serves as the chair of the GAC. Membership must be approved by the Department Head and the Dean of the Graduate School. The GAC should be composed of those faculty members best qualified to direct and evaluate the student's study plan and research. Responsibility for nominating the committee members lays with the student in consultation with his/her Graduate Research Mentor. The student must inform the GSAC of the committee membership.

### 7.2. Study Plan and Research

The M.S. study plan involves course work in the student's area of specialty and completion of an original research project resulting in an acceptable thesis. The study plan and research proposal should be submitted to the student's GAC by the end of the second semester. The plan consists of courses taken, grades received in these courses, courses planned to finish the degree program, and a brief research proposal as outlined in Appendix E. The emphasis should be on a clear, concise document. This plan will be discussed, amended (if necessary) and approved by the GAC.

### 7.3. Course Work

Minimal course loads are determined by the student with the approval of the GAC and to meet Graduate School requirements, but must include:

- a minimum of 30 hours of credit beyond the baccalaureate or professional degree in courses numbered 4000
  - o a minimum of 6 hours must be in VMED8000
  - o a minimum of 24 hours must be in courses other than Thesis Research (VMED 8000)
  - o a minimum of 12 hours must be in courses numbered 7000 and above of VMED 8000 (Thesis Research)
    - must include 3 hours of CBS7108 *Critical Analysis in Molecular Biology/Medicine*
    - must include 2 hours of VMED7004 *Introduction to Research*
    - must include 3 hours of CBS 7104 *Biomedical Cell and Molecular Biology*
    - must include at least three credit hours of *Experimental Statistics* at the 7000 level
- A limit of 6 hours of Research Techniques (7002) (any department) and 8 hours of Special Topics (7003) (any department) may be used toward any graduate degree.
- Students must fulfill the CBS Basic Core Requirements. Courses taken to correct a deficiency must be a graduate level course taken at LSU and may be applied to the total hours of credit described above.
- A maximum of 12 semester hours of transfer credit from other schools and/or credit taken while classified as an LSU extension or non-matriculating student may be used in a master's degree program if approved by the GAC, Department Head, and the Dean of the Graduate School.

### 7.4 Seminars

All candidates for the M.S. degree must at least once make an oral presentation of the results of the student's research upon completion of the program. Continuous attendance at departmental seminars is expected throughout the program.

### 7.5. Thesis

The M.S. student will submit to his/her GAC a well written, technical thesis based upon original research. The form of the thesis must be in accordance with the instructions in the pamphlet *Preparation of Theses, Dissertations and Monographs*, available in the Graduate Records Office of the Graduate School. A minimum of two hard copies on cotton paper are to be submitted to the CBS department for archival in the department and the SVM library.

### 7.6. Examinations

7.6.1. *Diagnostic Examination.* A diagnostic examination, testing competency in the basic core course content, may be administered by the GAC during their first year in the program. If a deficiency is identified, the student must acquire such knowledge with appropriate course work as part of their Study plan in CBS. The GSAC will assure that this requirement has been fulfilled.

7.6.2. *Final Examination and Thesis Defense.* A comprehensive final examination will include an open presentation and defense of the thesis followed by an oral examination by the GAC. In order to pass this examination, there may not be more than one dissenting vote.

#### 7.7. Duration of Course of Study

Full time M.S. students should complete their study plan and research within two academic years with an accumulation of 30 semester credit hours (see recommended timetable, Appendix A). Students combining a M.S. in CBS with a D.V.M. residency program should complete their study plan and research within three academic years (see recommended timetable, Appendix D). All students must complete their M.S. degree within five calendar years after matriculation.

#### 7.8. Recommendation for Direct Ph.D. Study Plan and Research

A student enrolled in the M.S. program may request that the M.S. degree be bypassed and that the student be allowed to pursue a Ph.D. program. The GAC will evaluate the performance and progress of the student to determine if the request is justified by the student's performance. If so, the student's Graduate Research Mentor should inform the GSAC and the CBS Department Head in writing. This privilege cannot be extended to a student without successful completion of two semesters in the graduate program.

### **8. DOCTOR OF PHILOSOPHY DEGREE**

The emphasis in the doctoral program is placed on original and creative research. The aim of this program is to enable the student to become a self-educating scholar and researcher.

#### 8.1. Graduate Advisory Committee (GAC)

The GAC should be composed of those faculty members best qualified to direct and evaluate the student's study plan and research. The Ph.D. GAC consists of at least 3 graduate faculty members.

- All 3 must be members of the graduate faculty.
- The major professor, who acts as chair or co-chair, must be from CBS.
- If the major professor is adjunct or a non-tenure track faculty member, a full-time tenured or tenure-track graduate faculty member must co-chair the committee.
- At least one-half of the graduate faculty on Ph.D. committees must be full-time tenured or tenure-track faculty at LSU.
- At least two committee members must be from CBS, and one of those 2 must be a full member of the LSU graduate faculty.
- Remaining members may be from CBS or outside the department if pertinent to the student's area of concentration; this is encouraged when such an individual would add expertise or resources necessary for the student's research, but at least one outside member must be a full member of the graduate faculty.
- Should the student declare a minor, one member of the committee must be in that field or department.
- One additional (minimum: 4<sup>th</sup>) member is appointed by the Dean of the Graduate School from a separate department.

The GAC must be approved by the Department Head and the Dean of the Graduate School and the membership forwarded to the GSAC. Responsibility for selecting the committee lays with the student in consultation with his/her Graduate Research Mentor.

The Dean's representative on the committee shall be selected by the Graduate School prior to the general examination (see below) and will usually serve on both the student's general and final examinations.

It is the responsibility of the student to keep the GAC informed of his/her academic and research progress. The student should schedule regular GAC meetings; the committee must meet at least annually in addition to the general exam meeting.

### 8.2. Study Plan and Research

Each Ph.D. student should receive exposure to the basic area of knowledge necessary for his/her future performance as a well trained Doctor of Philosophy: adequate knowledge in biological and physical sciences and in-depth knowledge in the selected areas of specialization. The research emphasis will be directed towards that which encompasses the expertise of the Graduate Research Mentor and members of the GAC.

In order to ensure a timely progression to graduation, a study plan and research should be submitted to the student's GAC by the end of the second semester. In addition to the *Program of Study for a Doctoral Degree* form required by the Graduate School, students must provide an outline of the courses taken, grades received in these courses, future courses, and a research proposal as outlined in Appendix E. The emphasis should be on generating a clear concise document. This plan will be discussed, amended (if necessary), and approved by the GAC.

### 8.3. Course Work

Minimal course loads are determined by the student with the approval of the GAC and to meet Graduate School requirements, but must include:

- 60 credits (the equivalent of approximately 3.5 years of course work = 9 credits/semester x 7 semesters) in courses numbered 4000 and above
- must include 24 hours of credit earned outside of research courses (VMED 8900 and VMED 9000)
- must include at least 2 hours of VMED 7004 *Introduction to Research*
- must include 3 hours of CBS 7108 *Critical Analysis in Molecular Biology/Medicine*
- must include 3 hours of CBS 7104 *Biomedical Cell and Molecular Biology*
- must include at least three credit hours of experimental statistics at the 7000 level
- must include at least six credit hours in professional curriculum courses selected from:
  - CBS 7109 (3) *Advanced Macroscopic Anatomy*
  - CBS 7112 (3) *Advanced Microscopic Anatomy*
  - CBS 7603 (3) *Clinical Toxicology*
  - CBS 7628 (3) *Biomedical Physiology I*
  - CBS 7629 (3) *Biomedical Physiology II*
  - CBS 7631 (3) *Biomedical Neuroscience*
  - CBS 7634 (4) *Biomedical Pharmacology*

- If the student declares a minor, the student must fulfill the requirements as defined by the minor department in addition to the CBS requirements
- A maximum of 6 hours of 7002 (any department) and 8 hours of 7003 (any department) may be used.

#### 8.4 Seminars

All candidates for the Ph.D. degree must present a seminar a total of two times; the first may be taken for credit as CBS 7001 (1) *Seminar*. The student must present an oral summary of his/her proposed research within 12 months of matriculation. For the final seminar, the student must make an oral presentation of the results of the student's research upon completion of the program. Continuous attendance at departmental seminars is expected throughout the program.

#### 8.5 Dissertation

A well-written dissertation based on the student's original research is part of the requirement for a Ph.D. The dissertation must demonstrate a contribution to the student's major field of study and a mastery of research techniques. The format of the dissertation must be in accordance with the instructions in the pamphlet *Guidelines for the Preparation of Theses, Dissertations and Monographs*, available in the Graduate Records Office or on the LSU Web Site. A minimum of two hard copies on cotton paper are to be submitted to the CBS department for archival in the department and the SVM library.

#### 8.6. Examinations

8.6.1. *Diagnostic Examination.* A diagnostic examination, testing competency in the basic core course content, may be administered by the GAC during their first year in the program. If a deficiency is identified, the student must acquire such knowledge with appropriate course work as part of their Study plan in CBS. The GSAC will assure that this requirement has been fulfilled.

8.6.2. *Qualifying Examination:* CBS does not require a qualifying examination; however, students may be required to take a qualifying examination at the discretion of the student's Graduate Research Mentor and/or GAC.

8.6.3 *General Examination:* Students become eligible to take the general examination after demonstrating adequate academic and professional aptitude to the GAC. The general examination should be scheduled soon after completion of course work, preferably before the start of the student's third academic year but must be passed by the end of the third academic year. At least two full semesters in residence must be fulfilled between the general examination and the final examination. Passage of the general examination demonstrates the student has acquired a broad-based scientific knowledge, a detailed understanding of their area of expertise, and can formulate a hypothesis and design an experimental approach to address the problem. The general examination is open to the members of the graduate faculty but is conducted by the GAC. The specific format of the examination will be determined by the GAC; however, the examination must include both written and oral portions. The oral portion of the examination may not be taken during a period in which LSU is not in session. Failure of the general examination requires more than one dissenting vote. Based on the results of the general examination, the GAC can recommend additional course work. In the event that the student fails the general examination, he/she may retake the general examination. Should the student choose to retake the general examination, the

examination must be completed within six calendar months. Should two members of the GAC again fail the student, the student will be dismissed from the CBS Graduate Program.

8.6.4. *Final Examination and Dissertation Defense:* At least three weeks prior to the scheduled date of the examination, the request for the student's final examination must be submitted by the graduate student to the GSAC who will forward the application to the Graduate School. The final examination and dissertation defense examines the procedure, content and student's understanding of the work presented in the dissertation. This examination may extend into subject matter related to or distant from the dissertation.

The final examination must be advertised and the presentation and question session are open; however, the oral exam is only open to the GAC and graduate faculty and non-members will be asked to leave the room during the discussion. The GAC will meet in closed session to discuss and evaluate the disposition of the degree. Failure of the final examination requires more than one dissenting vote.

#### 8.7. Duration of Course of Study

It is recommended that full-time Ph.D. students complete their study plan and research within four academic years (see Appendix B). Students combining a Ph.D. in CBS with a D.V.M. residency program should complete their study plan and research within five academic years (see recommended timetable, Appendix D). All students must complete their Ph.D. degree within seven calendar years after matriculation.

#### 8.8. Teaching Requirements

Currently, there are no teaching requirements for obtaining a degree in CBS. However, whenever possible, students are encouraged to obtain teaching experience in one of the professional courses in anatomy, physiology, pharmacology, or toxicology administered by the department, based on expertise developed during the student's academic training.

## APPENDIX A

### CHECKLIST FOR COMPLETION OF DEGREE REQUIREMENTS FOR MASTER OF SCIENCE (BASED ON A 2 YEAR COMPLETION)

MATRICULATION DATE:

\_\_\_\_\_

TO MEET CBS GUIDELINES:

BY THE END OF MONTH 2

\_\_\_\_\_ Choose Graduate Research Mentor

\_\_\_\_\_ Student sends a written request to the Department Head and informs the GA of formal Graduate Research Mentor assignment.

BY THE END OF SEMESTER 1

\_\_\_\_\_ Choose GAC

\_\_\_\_\_ Student sends a written request to the Department Head and informs the GA of formal GAC assignment.

BY THE END OF MONTH 12

\_\_\_\_\_ Identify a research problem

\_\_\_\_\_ Prepare a research proposal

\_\_\_\_\_ File a study plan with the GA

\_\_\_\_\_ Have research proposal approved by GAC

\_\_\_\_\_ Present first seminar

\_\_\_\_\_ Complete Diagnostic Examination

COMPLETION OF CORE REQUIREMENTS:

VMED 7004 (semester): \_\_\_\_\_

CBS7108 (semester): \_\_\_\_\_

CBS7104 (semester): \_\_\_\_\_; \_\_\_\_\_

SEMINARS (dates): \_\_\_\_\_; \_\_\_\_\_

ANNUAL MEETINGS WITH GAC (dates): \_\_\_\_\_; \_\_\_\_\_

TO PREPARE FOR GRADUATION:

CHECK WITH THE GRADUATE SCHOOL FOR DATES AND TIMES OF DEADLINES:

Deadline for application for degree: \_\_\_\_\_

Deadline for request for final examination: \_\_\_\_\_

Deadline for Examination Report and

Submission of Approved Thesis: \_\_\_\_\_

Graduation: \_\_\_\_\_

GRADUATION CHECKLIST:

- \_\_\_\_\_ Complete course work and get approval from GAC and the Graduate School
- \_\_\_\_\_ Complete research project
- \_\_\_\_\_ Set date for final examination with GAC
- \_\_\_\_\_ Set date for final seminar with CBS Seminar Coordinator
- \_\_\_\_\_ File *Application for Degree* with the Graduate School
- \_\_\_\_\_ File *Request for Final Exam* with Department Head and the Graduate School
- \_\_\_\_\_ Complete thesis and distribute to members of GAC three weeks before examination
- \_\_\_\_\_ Present Thesis Seminar
- \_\_\_\_\_ Defend thesis
- \_\_\_\_\_ Make all thesis corrections and submit thesis and *Committee Examination Report* to the Graduate School
- \_\_\_\_\_ Submit four hard copies of thesis to CBS for binding

**APPENDIX B**  
**CHECKLIST FOR COMPLETION OF**  
**DEGREE REQUIREMENTS FOR DOCTOR OF PHILOSOPHY**  
**(BASED ON A 4 YEAR COMPLETION)**

MATRICULATION DATE:

---

TO MEET CBS GUIDELINES:

BY THE END OF MONTH 2

\_\_\_\_\_ Choose Graduate Research Mentor

Student sends a written request to the Department Head and informs the GSAC of formal Graduate Research Mentor assignment

BY THE END OF SEMESTER 1

\_\_\_\_\_ Choose GAC

Student sends a written request to the Department Head and informs the GSAC of formal GAC assignment.

BY THE END OF MONTH 12

\_\_\_\_\_ Identify a research problem

\_\_\_\_\_ Prepare study and research proposal and have both approved by GAC

\_\_\_\_\_ File a *The Program of Study for the Doctoral Student* form with the Graduate School

\_\_\_\_\_ Complete Diagnostic Examination

\_\_\_\_\_ Present first seminar

BY THE END OF MONTH 24

\_\_\_\_\_ Complete course requirements

\_\_\_\_\_ Submit "*Request for General Examination*" to Department Head 4 weeks prior to examination date

\_\_\_\_\_ Schedule General Examination

Note: The Graduate School requires that the General Examination be taken within 36 months of matriculation and at least 2 semesters prior to graduation. Check with the Graduate School for deadlines.

COMPLETION OF CORE REQUIREMENTS:

VMED 7004 (semester): \_\_\_\_\_

CBS7108 (semester): \_\_\_\_\_

SEMINARS (dates): \_\_\_\_\_; \_\_\_\_\_

TO PREPARE FOR GRADUATION:

CHECK WITH THE GRADUATE SCHOOL FOR DATES AND TIMES OF DEADLINES:

Deadline for application for degree: \_\_\_\_\_

Deadline for request for final examination: \_\_\_\_\_

Deadline for Examination Report and Submission of Approved Dissertation: \_\_\_\_\_

Graduation: \_\_\_\_\_

GRADUATION CHECKLIST:

- \_\_\_\_\_ Complete course work and get approval from GAC and the Graduate School
- \_\_\_\_\_ Complete research project
- \_\_\_\_\_ Set date for final examination with GAC
- \_\_\_\_\_ Set date for final seminar with CBS Seminar Coordinator
- \_\_\_\_\_ File *Application for Degree* with the Graduate School
- \_\_\_\_\_ File *Request for Final Exam* with Department Head and the Graduate School
- \_\_\_\_\_ Complete thesis and distribute to members of GAC three weeks before examination
- \_\_\_\_\_ Present Dissertation Seminar
- \_\_\_\_\_ Defend dissertation
- \_\_\_\_\_ Make all dissertation corrections
- \_\_\_\_\_ Submit dissertation and *Committee Examination Report* to the Graduate School
- \_\_\_\_\_ Submit four hard copies of the dissertation to CBS for binding

**APPENDIX C**  
**CHECKLIST FOR COMPLETION OF DEGREE REQUIREMENTS FOR**  
**MASTER OF SCIENCE IN COMBINATION WITH A DVM RESIDENCY**  
**PROGRAM**

**(BASED ON A 3 YEAR COMPLETION)**

MATRICULATION DATE:

\_\_\_\_\_

TO MEET CBS GUIDELINES:

BY THE END OF YEAR 1

\_\_\_\_\_ Choose Graduate Research Mentor (written request to both the Department Head and the GSAC for assignment of a Graduate Research Mentor.)

\_\_\_\_\_ Choose GAC (inform both the Department Head and the GSAC of the GAC membership in writing.)

BY THE END OF THIRD SEMESTER

\_\_\_\_\_ Identify a research problem

\_\_\_\_\_ Prepare a research proposal

\_\_\_\_\_ File a Program of Study with the Graduate School

\_\_\_\_\_ Have research proposal approved by GAC

\_\_\_\_\_ Present first seminar

ANNUAL MEETINGS WITH GAC (dates): \_\_\_\_\_; \_\_\_\_\_;

\_\_\_\_\_

COMPLETION OF CORE REQUIREMENTS:

VMED 7004 (semester); \_\_\_\_\_

CBS7108 (semester): \_\_\_\_\_

CBS7104 (semester): \_\_\_\_\_

SEMINARS (dates): \_\_\_\_\_; \_\_\_\_\_

ANNUAL MEETINGS WITH GAC (dates): \_\_\_\_\_; \_\_\_\_\_

TO PREPARE FOR GRADUATION:

CHECK WITH THE GRADUATE SCHOOL FOR DATES AND TIMES OF  
DEADLINES:

Deadline for application for degree: \_\_\_\_\_

Deadline for request for final examination: \_\_\_\_\_

Deadline for Examination Report and Submission of Approved Thesis: \_\_\_\_\_

Graduation: \_\_\_\_\_

GRADUATION CHECKLIST:

- \_\_\_\_\_ Complete course work and get approval from GAC and the Graduate School
- \_\_\_\_\_ Complete research project
- \_\_\_\_\_ Set date for final examination with GAC
- \_\_\_\_\_ Set date for final seminar with CBS Seminar Coordinator
- \_\_\_\_\_ File *Application for Degree* with the Graduate School
- \_\_\_\_\_ File *Request for Final Exam* with Department Head and the Graduate School
- \_\_\_\_\_ Complete thesis and distribute to members of GAC three weeks before examination
- \_\_\_\_\_ Present Thesis Seminar
- \_\_\_\_\_ Defend thesis
- \_\_\_\_\_ Make all thesis corrections
- \_\_\_\_\_ Submit thesis and *Committee Examination Report* to the Graduate School
- \_\_\_\_\_ Submit four hard copies of thesis to CBS for binding

**APPENDIX D**  
**CHECKLIST FOR COMPLETION OF DEGREE REQUIREMENTS**  
**FOR DOCTOR OF PHILOSOPHY IN COMBINATION WITH A DVM**  
**RESIDENCY**

**(BASED ON A 5 YEAR COMPLETION)**

MATRICULATION DATE:

\_\_\_\_\_

TO MEET CBS GUIDELINES:

BY THE END OF THE YEAR 1

\_\_\_\_\_ Choose Graduate Research Mentor (written request to both the Department Head and the GA for assignment of a Graduate Research Mentor.)

\_\_\_\_\_ Choose GAC (inform both the Department Head and the GA of the GAC membership in writing.)

BY THE END OF YEAR 2

\_\_\_\_\_ Identify a research problem

\_\_\_\_\_ Prepare a research proposal

\_\_\_\_\_ File a Program of Study with the Graduate School

\_\_\_\_\_ Have research proposal approved by GAC

\_\_\_\_\_ Present first seminar

BY THE END OF YEAR 3

\_\_\_\_\_ Complete course requirements

\_\_\_\_\_ Submit "Request for General Examination" to Department Head 4 weeks prior to examination date

\_\_\_\_\_ Schedule General Examination

Note: The Graduate School requires that the General Examination be taken 2 semesters prior to graduation. Check with the Graduate School for deadlines.

COMPLETION OF CORE REQUIREMENTS:

VMED 7004 (semester); \_\_\_\_\_

CBS7008 (semester): \_\_\_\_\_

CBS7104 (semester): \_\_\_\_\_

SEMINARS (dates): \_\_\_\_\_; \_\_\_\_\_

TO PREPARE FOR GRADUATION:

CHECK WITH THE GRADUATE SCHOOL FOR DATES AND TIMES OF DEADLINES:

Deadline for application for degree: \_\_\_\_\_

Deadline for request for final examination: \_\_\_\_\_

Deadline for Examination Report and Submission of Approved Dissertation: \_\_\_\_\_

Graduation: \_\_\_\_\_

GRADUATION CHECKLIST:

- \_\_\_\_\_ Complete course work and get approval from GAC and the Graduate School
- \_\_\_\_\_ Complete research project
- \_\_\_\_\_ Set date for final examination with GAC
- \_\_\_\_\_ Set date for final seminar with CBS Seminar Coordinator
- \_\_\_\_\_ File *Application for Degree* with the Graduate School
- \_\_\_\_\_ File *Request for Final Exam* with Department Head and the Graduate School
- \_\_\_\_\_ Complete thesis and distribute to members of GAC three weeks before examination
- \_\_\_\_\_ Present Dissertation Seminar
- \_\_\_\_\_ Defend dissertation
- \_\_\_\_\_ Make all dissertation corrections
- \_\_\_\_\_ Submit dissertation and *Committee Examination Report* to the Graduate School
- \_\_\_\_\_ Submit four hard copies of the dissertation to CBS for binding

## **APPENDIX E**

### **FORMAT FOR THESIS/DISSERTATION PROPOSAL**

The study plan, which includes brief biographical sketch, publications, courses taken and grades, proposed course work and dissertation research proposal should be presented to the GAC as early in the program as possible. The research proposal should not exceed 15 double spaced pages. A copy of the study plan should be provided to the GSAC and each member of the GAC at least two weeks before the GAC meeting and should use the following format:

1. Title page
2. Brief biographical sketch (1 page)
3. Publications
4. List of courses taken and grades or a copy of transcript(s)
5. Planned course schedule
6. Proposal

6.1. *Project Summary* - The proposal must contain a project summary (abstract). The project summary itself should be approximately 250 words. The project summary should be a self-contained, specific description of the activity to be undertaken and should focus on:

- **Overall project goal(s), hypothesis and supporting objectives**
- **Plans to accomplish project goal(s).**

#### 6.2. *Project Body*

6.2.1. *Introduction.* A clear statement of the long-term goal(s) and supporting objectives or research questions of the proposed project should be included.

6.2.2. *Review of the Literature.* A concise summary of the historical and current literature pertinent to the research project should be included. The most significant published work in the field under consideration should be reviewed. The current status of research in this field of science should also be described. Preliminary data pertinent to the proposed research should be included in this section. All work cited should be referenced.

6.2.3. *Rationale and Significance.* Concisely present the rationale behind the proposed research. Any novel ideas or contributions that the proposed project offers should also be discussed in this section.

6.2.4. *Research Methods.* This section must include:

- A clearly stated hypothesis
- A description of the investigations and/or experiments proposed in the sequence in which the investigations or experiments are to be performed
- Techniques to be used in carrying out the proposed project, including the feasibility of the techniques
- Results expected
- Means by which experimental data will be analyzed or interpreted
- Pitfalls and limitations of proposed procedures, with alternative procedures identified

- A tentative schedule for conducting major steps involved in these investigations and/or experiments

6.3. *References* – The proposal should contain the complete citations for all references, including titles, and should conforming to an accepted journal format.

## **APPENDIX E FORMS**

The following pages contain copies of the forms\* referred to in the Checklists (Appendix A to D). These forms are available on the LSU Graduate School Web Site. The forms may also be obtained from the CBS departmental secretary or the graduate school.

1. *CBS Student Evaluation Form* - 4 copies - white
2. *Request for Master's Examination* - 2 copies - yellow
3. *Program of Study for Doctoral Degree* - 2-sided - 2 copies - blue  
    side 1 - Program of Study  
    side 2 - Probable Further Coursework
4. *Request for Change in Program of Study* - 2 copies - blue
5. *Request for Doctoral General or Final Examination* - 2 copies - blue
6. *Application for Degree* - Diploma Page – white

\* Note: Format of Required forms may change. Be sure to check with the Graduate School to assure that the appropriate forms are being used prior to submission.

**Student Evaluation Form**

Student Name: \_\_\_\_\_

Research Mentor: \_\_\_\_\_

Date: \_\_\_\_\_ Degree Sought: \_\_\_\_\_

\_\_\_\_\_

Overall Progress (Circle one):

Satisfactory Needs Improvement Unsatisfactory

\_\_\_\_\_

Academic Progress:

Research Progress:

Presentations Given:

\_\_\_\_\_  
Student Major Professor

\_\_\_\_\_  
CBS Graduate Advisor Department Head