

APPLICATION FOR NEW COURSE

1. Submitted by the College of Health Sciences Date: April 1, 2008

Department/Division proposing course: Clinical Sciences/Clinical & Reproductive Sciences

2. Proposed designation and Bulletin description of this course:

a. Prefix and Number RSC 702

b. Title* Molecular Reproduction

*If title is longer than 24 characters, write a sensible title (24 characters or less) for use on transcripts:

c. Courses must be described by at least one of the categories below. Include the number of actual contact hours per week for each category, as applicable.

CLINICAL COLLOQUIUM DISCUSSION LABORATORY LECTURE
 INDEPEND. STUDY PRACTICUM RECITATION RESEARCH RESIDENCY
 SEMINAR STUDIO OTHER – Please explain: _____

d. Please choose a grading system: Letter (A, B, C, etc.) Pass/Fail

e. Number of credit hours: 3

f. Is this course repeatable? YES NO If YES, maximum number of credit hours: _____

g. Course description:

The in-depth structure and function of the mammalian reproductive system will be studied as it relates to the understanding of human reproduction at the molecular level. Both male and female reproductive organs and associated hormones and behaviors will be studied. Experts in relevant fields will give lectures and students will be involved in discussions with the lecturers.

h. Prerequisite(s), if any:

Admission into the Reproductive Sciences Ph.D. program or permission of the course director and/or IBS 601.

i. Will this course be offered through Distance Learning? YES NO

If YES, please circle one of the methods below that reflects how the majority of the course content will be delivered:

Internet/Web-based Interactive video Extended campus Kentucky Educational Television (KET/teleweb) Other

Please describe "Other": _____

3. Teaching method: N/A or Community-Based Experience Service Learning Component Both

4. To be cross-listed as: n/a
Prefix and Number

Signature of chair of cross-listing department

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5. Requested effective date (term/year): Spring / 2010
6. Course to be offered (please check all that apply): Fall Spring Summer
7. Will the course be offered every year? YES NO
If NO, please explain: _____
8. Why is this course needed?
Requirement for the curriculum in the proposed Ph.D. program in Reproductive Sciences.
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9. a. By whom will the course be taught? Chemyong (Jay) Ko, Ph.D.
- b. Are facilities for teaching the course now available? YES NO
If NO, what plans have been made for providing them?

10. What yearly enrollment may be reasonably anticipated?
2-5
11. a. Will this course serve students primarily within the department? Yes No
- b. Will it be of interest to a significant number of students outside the department? YES NO
If YES, please explain.
Students in Ph.D. programs in science, including those enrolled in the IBS program, may elect to take this course.
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12. Will the course serve as a University Studies Program course[†]? YES NO
If YES, under what Area? _____
[†]AS OF SPRING 2007, THERE IS A MORATORIUM ON APPROVAL OF NEW COURSES FOR USP.
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13. Check the category most applicable to this course:
- traditional – offered in corresponding departments at universities elsewhere
 - relatively new – now being widely established
 - not yet to be found in many (or any) other universities
14. Is this course applicable to the requirements for at least one degree or certificate at UK? Yes No
15. Is this course part of a proposed new program? YES NO
If YES, please name: Ph.D. in Reproductive Sciences
16. Will adding this course change the degree requirements for ANY program on campus? YES NO
If YES[‡], list below the programs that will require this course:

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[‡]In order to change the program(s), a program change form(s) must also be submitted.

17. The major teaching objectives of the proposed course, syllabus and/or reference list to be used are attached.
18. Check box if course is 400G or 500. If the course is 400G- or 500-level, you must include a syllabus showing differentiation for undergraduate and graduate students by (i) requiring additional assignments by the graduate students; and/or (ii) the establishment of different grading criteria in the course for graduate students. (See SR 3.1.4)

19. Within the department, who should be contacted for further information about the proposed new course?

Name: Dr. Jay Ko Phone: 323-1100 X 80846 Email: cko2@uky.edu

20. Signatures to report approvals:

5-30-08
DATE of Approval by Department Faculty

Karen O. Staff / [Signature]
printed name Reported by Department Chair signature

6-09-08
DATE of Approval by College Faculty

Sharon Stewart / [Signature]
printed name Reported by College Dean signature

* DATE of Approval by Undergraduate Council

printed name Reported by Undergraduate Council Chair signature

* DATE of Approval by Graduate Council

printed name Reported by Graduate Council Chair signature

7/15/08
* DATE of Approval by Health Care Colleges Council (HCCC)

Heidi Anderson / [Signature]
printed name Reported by Health Care Colleges Council Chair signature

* DATE of Approval by Senate Council

Reported by Office of the Senate Council

* DATE of Approval by University Senate

Reported by Office of the Senate Council

*If applicable, as provided by the *University Senate Rules*. (<http://www.uky.edu/USC/New/RulesandRegulationsMain.htm>)

Molecular Reproduction

Course title and hours: Molecular Reproduction (3 hours; 2-hour lecture + 1-hour discussion)

Departmental/college code: RSC

Numerical designation and section number: 702-001 _____

Scheduled meeting day(s), time and place: (2 x 1.5 h / week); TBA

Course Director: CheMyong Ko, PhD

Assistant Professor

Dept. of Clinical Sciences

Email: cko2@uky.edu

Tel: 859-323-1100 ext 8-0846

Fax: 859-323-8957

<http://www.mc.uky.edu/CLS/ko/default.htm>

Pre-requisites: Admission into the Reproductive Sciences Ph.D. program or permission of the course director and or IBS 601

Course Description: The in-depth structure and function of mammalian reproductive system will be studied as it relates to the understanding of human reproduction at the molecular level. Both male and female reproductive organs, and associated hormones and behaviors will be studied. Experts in relevant fields will give lectures and students will be involved in the discussion with the lecturers.

Objectives: The objective of this course is to provide students with the general knowledge of the principles of mammalian reproduction, hormonal secretion and action mechanisms aging, and research tools. Students should be able to take and use their knowledge and have a scientific-based approach to the study of reproduction

At the end of the course, the student will be able to:

- Outline the general principles of mammalian reproduction.
- Describe reproductive events that occur at the molecular level.
- Describe secretion of reproductive hormones and the molecular basis for each.
- Detail the process of reproductive aging.
- Apply knowledge learned in the course to experimental methods

Evaluation: Grading will be based of two exams (100 points each) and other assignments and quizzes totaling 100 points. Final grades will be based on 300 points: 90-100% = A, 80-89%=B, 70-70% = C, below 70% = E

Grading: CSC 621

Midterm 35%

Final 45%

Assignments 5%

Quizzes 15%

Delivery mode: classroom-team teaching

University Policies:

Excused absences: Acceptable reasons for excused absences are listed in *Student's rights and Responsibilities, Section 5.2.4.2*. Briefly, these include serous illness, illness or death of someone in the student's immediate family, University sponsored trips, major religious holidays, and other circumstances the instructor finds reasonable. NOTE: If you intend to be absent to observe a major religious holiday, you must notify Dr. Ko two weeks prior to the upcoming date.

When there is an excused absence, you will be given the opportunity to make up missed work and/ or exams. It is the student's responsibility to inform the instructor of the absence, preferably in advance, but no later than one week after the absence.

Senate Rule 5.2.4.2 states that faculty have the right to request "appropriate verification" when students claim an excused absence because of illness or death in the immediate family. The University Health Services (UHS) will no longer give excuses for absences from class due to illness or injury. UHS forms can be date stamped to show that students went to the trouble of going to University Health Service, but it does not mean that students actually saw a physician or a nurse. If the faculty member wants further verification that a student kept an appointment with University Health Services (especially when there have been multiple

or prolonged absences from class), the student will need to sign a release of information form (available from UHS) that will give permission for the staff to talk with the faculty member.

Inclement weather: In case of inclement weather or emergencies, class will be held unless the University administration cancels classes. For University closing of classes and offices, call the UK Infoline at 257-5684 or check UKTV Cable Channel 16. Students should use their judgment about coming to class.

Cheating and plagiarism: Descriptions of what constitutes cheating and plagiarism are found in *Student Rights and Responsibilities, Sections 6.3.1 and 6.3.2*. Be aware that the minimum consequence for either offense is an "E" in the course. Suspension and dismissal from the University are also options.

Classroom and Learning Accommodations: Instructors will make reasonable accommodations for physical and/or learning disabilities that could inhibit student academic success. The Disability Resource Center certifies the need for and specifies the particular type of such accommodations on a student-by-student basis. Students seeking accommodations must submit this certification to the faculty. Contact the Center staff at 257-2754.

Writing Skills: Helping promote scholarship is more than simply teaching the subject matter -- all students need to improve and refine their skills in verbal and written expression. Regardless of discipline, faculty have the right -and the obligation- to expect students to use English properly in all aspects of the course (S.R.5.2.4.3). Instructors may ask students to rewrite papers, make writing style one of the grading criteria, and report a seriously deficient student to his/her college for remedial work.

<u>Lecture #</u>	<u>Lecture Topic</u>
1	Organizational meeting & Hypothalamic-pituitary axis-gonadal axis
2	Female Reproduction
3	Male Reproduction
4	Hypothalamic/Pituitary Hormone
5	Gonadal Steroid Hormones
6	FSH/LH synthesis and secretion
7.	Estrogen/testosterone/progesterone synthesis
8	Female reproductive track
Midterm Exam	
9	Male reproductive track
10	Folliculogenesis and ovulation
11	Oocyte maturation and fertilization
12	Mechanism of Hormone action
13	Reproductive aging and menopause
14	Animal models in reproductive studies
15	Pregnancy and embryo development
16	Menstrual cycle
17	Circadian rhythm
Final Exam	