

APPLICATION FOR CHANGE IN EXISTING COURSE: MAJOR & MINOR

1. Submitted by College of _____ Date _____
Department/Division offering course _____
2. Changes proposed:
 - (a) Present prefix & number _____ Proposed prefix & number _____
 - (b) Present Title _____
New Title _____
 - (c) If course title is changed and exceeds 24 characters (Including spaces), include a sensible title (not to exceed 24 characters) for use on transcripts:

 - (d) Present credits: _____ Proposed credits: _____
 - (e) Current lecture: laboratory ratio _____ Proposed: _____
 - (f) Effective Date of Change: (Semester & Year) _____
3. To be Cross-listed as: _____
Prefix and Number _____ Signature: Department Chair _____
4. Proposed change in Bulletin description:
 - (a) Present description (including prerequisite(s)):

 - (b) New description:

 - (c) Prerequisite(s) for course as changed: _____
5. What has prompted this proposal?

6. If there are to be significant changes in the content or teaching objectives of this course, indicate changes:

7. What other departments could be affected by the proposed change?

8. Will changing this course change the degree requirements in one or more programs? * Yes No
If yes, please attach an explanation of the change.*
- 9.. Is this course currently included in the University Studies Program? Yes No
If yes, please attach correspondence indicating concurrence of the University Studies Committee.
10. If the course is a 100-200 level course, please submit evidence (e.g., correspondence) that the Community College System has been consulted.

*NOTE: Approval of this change will constitute approval of the program change unless other program modifications are proposed.

11. Is this a minor change? Yes No
(NOTE: See the description on this form of what constitutes a minor change. Minor changes are sent directly from the Dean of the College to the Chair of the Senate Council. If the latter deems the change not to be minor, it will be sent to the appropriate Council for normal processing.)

12. Within the Department, who should be consulted for further information on the proposed course change?

Name: _____ Phone Extension: _____

Signatures of Approval:

Department Chair	Date
Dean of the College	Date
	Date of Notice to the Faculty
**Undergraduate Council	Date
**Graduate Council	Date
**Academic Council for the Medical Center	Date
**Senate Council	Date of Notice to University Senate

**If applicable, as provided by the Rules of the University Senate.

ACTION OTHER THAN APPROVAL

The Minor Change route for courses is provided as a mechanism to make changes in existing courses and is limited to one or more of the following:

- a. change in number within the same hundred series;
- b. editorial change in description which does not imply change in content or emphasis;
- c. editorial change in title which does not imply change in content or emphasis;
- d. change in prerequisite which does not imply change in content or emphasis;
- e. cross-listing of courses under conditions set forth in item 3.0;
- f. correction of typographical errors. [University Senate Rules, Section III - 3.1]

IBS 605/MI 604: Experimental Genetics

Explanation of Program Change related to Change of IBS 605/MI604 from 2 credit-hour to 3 credit-hour course.

The IBS Curriculum will be affected by the change in credit-hours for IBS 605/MI 604. Currently, the fall semester of the IBS Curriculum includes a total of 9 credit-hours. With the increase of 1 credit-hour for IBS 605, the fall semester of the IBS Curriculum will include a total of 10 credit-hours of instruction.

Current IBS Curriculum for fall semester:

Fall semester

IBS601	Biomolecules and Metabolism	3-hour credit
IBS603	Cell Biology	3-hour credit
IBS605	Experimental Genetics	2-hour credit
IBS607	Seminar in Integrated Biomedical Sciences	0-hour credit
IBS609	Research in Integrated Biomedical Sciences	1-hour credit
TOTAL		9 HOURS

Proposed IBS Curriculum for fall semester:

Fall semester

IBS601	Biomolecules and Metabolism	3-hour credit
IBS603	Cell Biology	3-hour credit
IBS605	Experimental Genetics	3-hour credit
IBS607	Seminar in Integrated Biomedical Sciences	0-hour credit
IBS609	Research in Integrated Biomedical Sciences	1-hour credit
TOTAL		10 HOURS

IBS 605: EXPERIMENTAL GENETICS

FACULTY	DEPT.	OFFICE	PHONE	EMAIL
Brett Spear Course Director	Microbiology	MN 458 UKMC	257-5167	bspear@uky.edu

A. COURSE DESCRIPTION

This is a 3 credit-hour introductory molecular genetics course designed to expose the first year graduate student to contemporary methods and concepts in genetics and genomic analysis. Model systems and classic papers will be presented as paradigms for important genetic principles.

B. COURSE OBJECTIVES

This course strives to provide graduate students with a firm foundation in modern genetic principles to prepare them for subsequent courses in molecular biology and to aid them in the design of their own experiments.

C. TEXT

TBA

Additional required reading from the primary literature will be assigned.

D. PREREQUISITES

CHE 105 and 107, General College Chemistry I and II;
CHE 230 and 232, Organic Chemistry I and II
BIO 150 and 152, Principles of Biology I and II
Or equivalents.

E. GRADING

There will be four exams of equal weight, each covering approximately one-fourth of the course.

F. UNDERGRADUATE ENROLLMENT

Undergraduate students may enroll in the course with the permission of the course director and the Graduate School.

G. OFFICE HOURS

Course directors and instructors will be available for consultation. Students are encouraged to consult with all participating faculty.

H. DAYS, DATES, TIMES

IBS 605 meets Monday, Wednesday and Friday, 10-10:50 a.m. in HS 115. Exams during the semester are from 6-8 p.m. in the rooms and on the days/dates indicated. Please refer to the Table below for complete scheduling information.

I. TOPICS

IBS 605 – Experimental Genetics

Day	Date	Room	Lecture Topic	Readings	Instructor	Dept.
Wed.	25-Aug	HS115	Course Overview			
Fri.	27	HS115	Introduction to Prokaryote Genetics			
Mon	30	HS115	Bacterial Conjugation			
Wed	01-Sep	HS115	Mapping			
Fri	03	HS115	Complementation: lac operon			
Mon	06-Sep		Labor Day			
Wed	08	HS115	Transduction			
Fri	10	HS115	Transformation			
Mon	13	HS115	Transposable Elements			
Wed.	15	HS115	Transposable Elements			
Fri.	17	HS115	PAPER/Discussion 1			
Mon	20	HS115	EXAM 1			
Wed	22	HS115	Transmission of DNA 1			
Fri	24	HS115	Transmission of DNA 2			
Mon	27	HS115	Mendelian Genetics 1			
Wed	29	HS115	Mendelian Genetics 2			
Fri.	01-Oct		Fall Break			
Mon	04	HS115	Non-Mendelian Genetics			
Wed	06	HS115	Organization of the Genome 1			
Fri	08	HS115	Organization of the Genome 2			
Mon	11	HS115	Linkage Analysis 1			
Wed	13	HS115	Linkage Analysis 2			
Fri	15	HS115	Classic Paper/Discussion 2			
Mon	18		EXAM 2			
Wed.	20	HS115	Yeast Genetics 1			
Fri	22	HS115	Yeast Genetics 2			
Mon	25	HS115	Yeast Genetics 3			
Wed	27	HS115	Drosophila Genetics 1			
Fri	29	HS115	Drosophila Genetics 2			
Mon	01-Nov	HS115	Zebrafish/C elegans Genetics			
Wed	03	HS115	Mouse Genetics 1			
Fri.	05	HS115	Mouse Genetics 2			
Mon	08	HS115	Transgenic Animals			
Wed	10	HS115	Classic Paper/Discussion 3			
Fri	12		EXAM 3			

Day	Date	Room	Lecture Topic	Readings	Instructor	Dept.
Mon	15-Nov	HS115	Human Genetics 1			
Wed	17	HS115	Human Genetics 2			
Fri	19	HS115	Human Cancer Genetics			
Mon	22	HS115	Gene Regulation 1			
Wed	24	HS115	Gene Regulation 2			
Fri.	26		<i>Thanksgiving Break</i>			
Mon.	29	HS115	DNA Repair			
Wed.	01-Dec	HS115	Recombination/Rearrangement 1			
Fri.	03	HS115	Recombination/Rearrangement 2			
Mon.	06	HS115	Genomics			
Wed.	08	HS115	Comparative Genomics			
Fri.	10	HS115	Classic Paper/Discussion 4			
Finals	Week		EXAM 4			