

1. General Information

1a. Submitted by the College of: MEDICINE

Date Submitted: 5/16/2013

1b. Department/Division: Integrated Biomedical Sciences

1c. Contact Person

Name: Brett T. Spear

Email: bspear@uky.edu

Phone: 257-5167

Responsible Faculty ID (if different from Contact)

Name:

Email:

Phone:

1d. Requested Effective Date: Specific Term/Year ¹ Fall 2013

1e. Should this course be a UK Core Course? No

2. Designation and Description of Proposed Course

2a. Will this course also be offered through Distance Learning?: No

2b. Prefix and Number: IBS 610

2c. Full Title: Critical Scientific Readings

2d. Transcript Title:

2e. Cross-listing:

2f. Meeting Patterns

DISCUSSION: 30

2g. Grading System: Letter (A, B, C, etc.)

2h. Number of credit hours: 2

2i. Is this course repeatable for additional credit? No

If Yes: Maximum number of credit hours:

If Yes: Will this course allow multiple registrations during the same semester?

2j. Course Description for Bulletin: The major emphasis of this course is to develop within students the ability to critically read, evaluate and critique papers in the areas of biochemistry, molecular biology, and genetics. Students will meet weekly for two hours in a small group setting to discuss papers, with all groups reading the same set of papers. Each group of students (5-6/group) will meet weekly with one faculty member during the course of the semester. Grading will be based on attendance, participation, mock manuscript reviews, and student-led classes.

2k. Prerequisites, if any: Students are required to have taken IBS601 and IBS602 or to take IBS601 and IBS 602 concurrently with this course.

2l. Supplementary Teaching Component:

3. Will this course taught off campus? No

If YES, enter the off campus address:

4. Frequency of Course Offering: Fall,

Will the course be offered every year?: Yes

If No, explain:

5. Are facilities and personnel necessary for the proposed new course available?: Yes

If No, explain:

6. What enrollment (per section per semester) may reasonably be expected?: 20-30

7. Anticipated Student Demand

Will this course serve students primarily within the degree program?: Yes

Will it be of interest to a significant number of students outside the degree pgm?: No

If Yes, explain: [var7InterestExplain]

8. Check the category most applicable to this course: Relatively New – Now Being Widely Established,

If No, explain:

9. Course Relationship to Program(s).

a. Is this course part of a proposed new program?: No

If YES, name the proposed new program:

b. Will this course be a new requirement for ANY program?: Yes

If YES, list affected programs: Integrated Biomedical Sciences graduate program

10. Information to be Placed on Syllabus.

a. Is the course 400G or 500?: No

b. The syllabus, including course description, student learning outcomes, and grading policies (and 400G-/500-level grading differentiation if applicable, from 10.a above) are attached: No

Distance Learning Form

Instructor Name:

Instructor Email:

Internet/Web-based: No

Interactive Video: No

Hybrid: No

1. How does this course provide for timely and appropriate interaction between students and faculty and among students? Does the course syllabus conform to University Senate Syllabus Guidelines, specifically the Distance Learning Considerations?

2. How do you ensure that the experience for a DL student is comparable to that of a classroom-based student's experience? Aspects to explore: textbooks, course goals, assessment of student learning outcomes, etc.

3. How is the integrity of student work ensured? Please speak to aspects such as password-protected course portals, proctors for exams at interactive video sites; academic offense policy; etc.

4. Will offering this course via DL result in at least 25% or at least 50% (based on total credit hours required for completion) of a degree program being offered via any form of DL, as defined above?

If yes, which percentage, and which program(s)?

5. How are students taking the course via DL assured of equivalent access to student services, similar to that of a student taking the class in a traditional classroom setting?

6. How do course requirements ensure that students make appropriate use of learning resources?

7. Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.

8. How are students informed of procedures for resolving technical complaints? Does the syllabus list the entities available to offer technical help with the delivery and/or receipt of the course, such as the Information Technology Customer Service Center (<http://www.uky.edu/UKIT/>)?

9. Will the course be delivered via services available through the Distance Learning Program (DLP) and the Academic Technology Group (ATL)? NO

If no, explain how student enrolled in DL courses are able to use the technology employed, as well as how students will be provided with assistance in using said technology.

10. Does the syllabus contain all the required components? NO

11. I, the instructor of record, have read and understood all of the university-level statements regarding DL.

Instructor Name:

SIGNATURE|MRWH224|Melissa R Wilkeson|College approval for ZCOURSE_NEW IBS 610|20130225

SIGNATURE|JDLIND2|Jim D Lindsay|HCCC approval for ZCOURSE_NEW IBS 610|20130308

SIGNATURE|ZNNIKO0|Roshan N Nikou|Graduate Council approval for ZCOURSE_NEW IBS 610|20130326

SIGNATURE|WF-BATCH|Batch User|Reminder for minor course work item|20130502

SIGNATURE|MRWH224|Melissa R Wilkeson|IBS 610 NEW College Review|20130403

IBS 610
Critical Scientific Readings
SYLLABUS
Fall 2013

<i>Faculty</i>	<i>Dept.</i>	<i>Office</i>	<i>Phone</i>	<i>Email</i>
<i>Course Director</i> Brett Spear	Micro, Immuno & Molec Gen.	Combs210	257-5167	bspear@uky.edu
<i>Course Faculty</i>				
Mike Kilgore	Molec. and Biomed. Pharmacol.	MN354 UKMC	323-1821	m.kilgore@uky.edu
Joe McGillis	Micro, Immuno & Molec Gen.	MN402 Willard	257-6721	jpmcgi01@uky.edu
Martha Peterson	Micro, Immuno & Molec Gen.	Combs 207	257-5478	mlpete01@uky.edu
Charles Snow	Micro, Immuno & Molec Gen.	MN410 Willard	323-8953	ecsnow01@uky.edu
Sidney Whiteheart	Molec. & Cell. Biochemistry	261 BBSRB	257-4882	whitehe@uky.edu
Zhigang Wang	Grad. Center for Toxicology	340 HSRB	323-5784	zwang@uky.edu

A. COURSE DESCRIPTION

IBS 610 (Critical Scientific Readings) is a 2-credit hour Fall semester course that is targeted to first-year PhD students in the Integrated Biomedical Sciences (IBS) program. The major emphasis of this course is to develop within students the ability to critically read, evaluate and critique papers in the areas of biochemistry, molecular biology, and genetics. Students will meet weekly for two hours in a small group setting to discuss papers, with all groups reading the same set of papers. Each group of students (5-6/group) will meet weekly with one faculty member during the course of the semester. Students will be provided with papers at least one week prior to class and will be expected to have read the papers and be prepared to discuss papers during class. Since all (or nearly all) students in IBS610 will also be taking IBS601 (Biochemistry) and IBS602 (Molecular Biology and Genetics), the topics discussed in papers will coincide with topics being covered in IBS601 and/or IBS602 to help reinforce concepts from these didactic lectures courses. While faculty will lead the discussions during the first part of the course, students will be expected to lead class discussions in the latter part of the semester. Grading will be based on attendance, participation, student led classes, mock manuscript reviews (mid-term), and proposal development (final exam).

B. OFFICE HOURS

The Course Director and participating faculty will be available for consultation. Students are encouraged to consult with all participating faculty as needed. Students are strongly encouraged to schedule an appointment with faculty by email or phone to set up an appointment since specific office hours are not always established.

C. COURSE SCHEDULE

Small groups will meet in rooms to be announced. Classes will meet every Monday from 2:00 PM – 3:50 PM, beginning on the first Monday of the semester.

D. OBJECTIVES/STUDENT LEARNING OUTCOMES

The primary objectives of this course are to: (1) develop within students the ability to critically evaluate data and determine whether they agree with the authors' conclusions; (2) determine whether experiments have been properly designed, performed, and interpreted; (3) develop the ability to review and critique manuscripts; and (4) effectively communicate ideas and thoughts with peers and faculty mentors in group discussions.

E. CLASS ATTENDANCE

Since this course is based on the reading and discussion of primary literature articles, attendance is mandatory. While students will be excused for justifiable reasons (i.e., illness, death in family, religious holidays as defined in Senate Rule 5.2.4.2), the student is expected to alert his/her faculty mentor and the Course Director of any absence prior to the missed class. Each faculty member will monitor attendance and unexcused absences may result in a lower final grade (See H below).

F. COURSE MATERIALS

There is no textbook for this course. Papers and other materials will be provided prior to class via Blackboard (see <https://elearning.uky.edu/>). Textbooks used in other IBS courses (IBS601, IBS602) may serve as useful references for the materials covered in this course.

G. PREREQUISITES

Students are required to have taken IBS601 and IBS602 (which are taught every fall semester) or to take IBS601 and IBS 602 concurrently with this course. A strong background in molecular biology, biochemistry and chemistry (including organic chemistry) is highly recommended. Non-IBS students can enroll with the permission of the course director.

H. GRADING AND ATTENDANCE POLICIES

Grades in this course will be based on attendance (20%), participation (20%; each student is expected to ask at least one question per meeting) mid-term (20%; manuscript review), leading discussion (20%) and final exam (20%; develop hypothesis and aims of research proposal). Students who miss the mid-term or final exam due to an excused absence will be expected to make-up the exam as soon as possible and as allowed under University regulations. Students who miss either exam due to an unexcused absence will receive a "0" grade for that exam.

The grading standards employed are listed below and students who perform in these ranges will be guaranteed to receive the indicated grades:

A: 90-100%

B: 80-89%

C: 70-79%

E: below 70%

Mid-term exam: Students will be given a manuscript to review. Each student is expected to write a critique that briefly describes the purpose the study, a summary of the results, and a critical assessment of the data and conclusions. Total length of critique will no more than 3 pages.

Final exam: Students will be given data from a series of experiments. Based on this data, the student will be expected to propose future studies presented in the format of a written research proposal that will include a hypothesis, specific aims, and experimental design. Total length of proposal will be no more than 4 pages.

Depending on the performance of the class as a whole, some adjustments (curving) **may** take place on the final cumulative semester grade. For example, median score = B, + 1 Standard Deviation = A, - 1 Standard Deviation = C may be employed but **is not a rule**. Graduate students will not receive a grade of "D" but instead will receive a failing "E" mark for an average under 70%.

Exam grades can be submitted for a re-evaluation if the student feels that they can justify their position. Requests for re-evaluation must be accompanied by a written explanation of the perceived discrepancy and must be made within one week (7 days) of the exam's return.

All examinations must be taken at the scheduled time except when legitimate medical or personal reasons make it impossible to do so. Prior notification of your absence to the course director is required. In these cases, either an oral or written make-up examination will be given. An "I" grade will not be assigned to students who simply miss an examination.

Incompletes: An incomplete grade due to illness or other emergencies may be arranged. A request for an incomplete due to illness must be accompanied by a letter from your doctor, the Student Health Service, or a hospital. Lack of time to complete assigned work, or other reasons not relating to unavoidable excused absences, will not be accepted as a valid reason for petitioning for an incomplete. No incompletes will be given unless you have a prior written agreement with the instructor BEFORE the end of classes.

I. ACADEMIC HONESTY and INTEGRITY

Cheating, plagiarism, falsification or misuse of data are not allowed by the University of Kentucky. No exception to this policy will be tolerated. The course director reserves the right to assign a zero for the assignment in question as a minimum action. It is the responsibility of the student to become familiar with the rules of academic dishonesty as outlined in the Code of Student Rights and Responsibilities (<http://www.uky.edu/Ombud>). Ignorance of these guidelines is not a defensible position against these rules.

Part II of *Student Rights and Responsibilities* (<http://www.uky.edu/StudentAffairs/Code/part2.html>) states that all academic work, written or otherwise, submitted by students to their instructors or other academic supervisors, is expected to be the result of their own thought, research, or self-expression. In cases where students feel unsure about the question of plagiarism involving their own work, they are obliged to consult their instructors on the matter before submission. Programs and resources including, sources such as <http://www.plagiarism.org/> will be employed to educate students about plagiarism and academic integrity.

A major goal of IBS610 is to develop within the students the ability to communicate their own thoughts. In this regard, participating faculty will emphasize the concept of plagiarism. When students submit work purporting to be their own, but which in any way borrows ideas, organization, wording or anything else from another source without appropriate acknowledgement of the fact, the students are guilty of plagiarism. Plagiarism includes reproducing someone else's work, whether it is a published article, chapter of a book, a paper from a friend or some file, or something similar to this.

J. ACCOMODATIONS

If you have a documented disability that requires academic accommodations, please see the Course Director as soon as possible during scheduled office hours. In order to receive accommodations in this course, a Letter of Accommodation must be provided from the Disability Resource Center (Room 2, Alumni Gym, 257-2754, email address: jkarnes@email.uky.edu) for coordination of campus disability services available to students with disabilities.

K. INCLEMENT WEATHER

The University of Kentucky has a detailed policy for decisions to close in inclement weather. The snow policy is described in detail at http://www.uky.edu/PR/News/severe_weather.htm or you can call (859) 257-5684. In general, the University is not closed for severe weather, but the instructor may decide to cancel the class, in which case, s/he will post this information on Blackboard at <https://elearning.uky.edu/webapps/portal/frameset.jsp>

L. GENERAL OUTLINE FOR IBS610

Papers for discussion will be posted on blackboard at least one week before class.

#	Date	Topic
	2	<i>No Class – Labor Day</i>
1	9	Mentor-led Discussion # 1
2	16	Mentor-led Discussion # 2
3	23	Mentor-led Discussion # 3
4	30	Mentor-led Discussion # 4
5	Oct 7	Mentor-led Discussion # 5; Mid-term Exam handed out
6	14	Mentor-led Discussion # 6
7	21	Mentor-led Discussion # 7; Mid-term Exam due
8	28	Mentor-led Discussion # 8
9	Nov 4	Mentor-led Discussion # 9
10	11	Student-led Discussion # 1
11	18	Student-led Discussion # 2
12	25	Student-led Discussion # 3; Take-home Final Exam handed out
13	Dec 2	Student-led Discussion # 4
14	9	Student-led Discussion # 5
	18	<i>Final Exam Due</i>