

Lindsay, Jim D.

From: Dearinger, Lana
Sent: Tuesday, October 30, 2012 4:34 PM
To: Lindsay, Jim D.
Cc: Sauer, Marlene J
Subject: Course Change Proposal for PGY 603
Attachments: PGY 603 Course Change_071112.pdf; DW e-mail_PGY603.pdf

Jim:

Please find attached a course change form for PGY 603, to include the additional pages required for distance learning approval offering. Also attached is a copy of an e-mail exchange with University Registrar Don Witt.

This course proposal is being transmitted to you for HCCC review and approval, following the College of Medicine approvals from the Curriculum Committee (080612) and the Faculty Council (100112).

Per our earlier discussion, there was some confusion about the current status of the course. It was thought to be purged, but in fact appears as an active course in both the UK Bulletin and the module catalog in SCLM/SAP. Don is asking his staff members to look into the matter. Meanwhile, he indicated that the department should not be penalized when the faculty member in Physiology acted in good faith with this proposal, believing this to be an active course.

If you have any questions, or need additional information, please let me know. And again, I thank you for your help during this staff transition time in the Office of Medical Education.

Lana

Lana Dearinger
Technical Administrator/Accreditation
Office of Medical Education
UK College of Medicine
138 Leader Avenue Room 210
Lexington, KY 40506-9983
(859) 323 -6446

Dearinger, Lana

From: Witt, Don
Sent: Tuesday, October 30, 2012 3:58 PM
To: Dearinger, Lana
Subject: RE: phone call

Ok with me too...thanks

From: Dearinger, Lana
Sent: Tuesday, October 30, 2012 3:57 PM
To: Witt, Don
Subject: RE: phone call

I just noticed that the initial date and departmental approval *predates* the rollout of eCATS. I think maybe the HCCC will take paper in this situation, based on some other course proposals. I will double-check with Jim Lindsay on this if that is okay with you.

From: Witt, Don
Sent: Tuesday, October 30, 2012 3:54 PM
To: Dearinger, Lana
Subject: RE: phone call

Lana – all is good – please proceed with putting the course in eCATS....thanks, Don

From: Dearinger, Lana
Sent: Tuesday, October 30, 2012 1:38 PM
To: Witt, Don
Subject: phone call

Don:

If you have a free moment today or tomorrow, would you give me a call at 3-6446? I have a situation ...

Lana

Lana Dearinger
Technical Administrator/Accreditation
Office of Medical Education
UK College of Medicine
138 Leader Avenue Room 210
Lexington, KY 40506-9983
(859) 323 -6446

COURSE CHANGE FORM

Complete 1a – 1f & 2a – 2c. Fill out the remainder of the form as applicable for items being changed.

1. General Information.					
a. Submitted by the College of:		Medicine		Today's Date: 07/11/12	
b. Department/Division:		Physiology			
c. Is there a change in "ownership" of the course?				YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
If YES, what college/department will offer the course instead? _____					
d. What type of change is being proposed? <input checked="" type="checkbox"/> Major <input type="checkbox"/> Minor ¹ (place cursor here for minor change definition)					
e. Contact Person Name:		Francisco H. Andrade		Email:	paco.andrade@uky.edu
				Phone:	323 6576
f. Requested Effective Date: <input checked="" type="checkbox"/> Semester Following Approval OR <input type="checkbox"/> Specific Term ² : _____					
2. Designation and Description of Proposed Course.					
a. Current Prefix and Number:		PGY 603		Proposed Prefix & Number: _____	
b. Full Title:		Design and Analysis		Proposed Title: _____	
c. Current Transcript Title (if full title is more than 40 characters): _____					
c. Proposed Transcript Title (if full title is more than 40 characters): _____					
d. Current Cross-listing: <input checked="" type="checkbox"/> N/A OR Currently ³ Cross-listed with (Prefix & Number): _____					
Proposed – <input type="checkbox"/> ADD ³ Cross-listing (Prefix & Number): _____					
Proposed – <input type="checkbox"/> REMOVE ^{3,4} Cross-listing (Prefix & Number): _____					
e. Courses must be described by at least one of the meeting patterns below. Include number of actual contact hours ⁵ for each meeting pattern type.					
Current:	42 Lecture	_____ Laboratory ⁵	_____ Recitation	_____ Discussion	_____ Indep. Study
	_____ Clinical	_____ Colloquium	_____ Practicum	_____ Research	_____ Residency
	_____ Seminar	_____ Studio	_____ Other – Please explain: _____		
Proposed:	_____ Lecture	_____ Laboratory	_____ Recitation	_____ Discussion	_____ Indep. Study
	_____ Clinical	_____ Colloquium	_____ Practicum	_____ Research	_____ Residency
	_____ Seminar	_____ Studio	_____ Other – Please explain: _____		
f. Current Grading System: <input checked="" type="checkbox"/> Letter (A, B, C, etc.) <input type="checkbox"/> Pass/Fail					
Proposed Grading System: <input type="checkbox"/> Letter (A, B, C, etc.) <input type="checkbox"/> Pass/Fail					

¹ See comment description regarding minor course change. *Minor changes are sent directly from dean's office to Senate Council Chair.* If Chair deems the change as "not minor," the form will be sent to appropriate academic Council for normal processing and contact person is informed.

² Courses are typically made effective for the semester following approval. No course will be made effective until all approvals are received.

³ Signature of the chair of the cross-listing department is required on the Signature Routing Log.

⁴ Removing a cross-listing does not drop the other course – it merely unlinks the two courses.

⁵ Generally, undergrad courses are developed such that one semester hr of credit represents 1 hr of classroom meeting per wk for a semester, exclusive of any lab meeting. Lab meeting generally represents at least two hrs per wk for a semester for 1 credit hour. (See SR 5.2.1.)

COURSE CHANGE FORM

g.	Current number of credit hours: <u>3</u>	Proposed number of credit hours: _____	
h.	Currently, is this course repeatable for additional credit?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	Proposed to be repeatable for additional credit?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
	If YES: Maximum number of credit hours: _____		
	If YES: Will this course allow multiple registrations during the same semester?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
i.	Current Course Description for Bulletin:	This course focuses on skills necessary to critically evaluate the methodology of biological experiments. Participants evaluate research design problems which may or may not have serious design errors or inappropriate statistical inferences or invalid conclusions. Participants also prepare similar design problems in their research area.	
	Proposed Course Description for Bulletin:	This is a course for students in the biomedical sciences interested in understanding the principles and pitfalls of experimental design and data analysis. The course focuses on why specific experimental design and analysis strategies are applied.	
j.	Current Prerequisites, if any:	Statistics course; consent of instructor.	
	Proposed Prerequisites, if any:	Consent of instructor. An introductory statistics course is recommended, e.g. STA570 or STA580.	
k.	Current Distance Learning (DL) Status:	<input checked="" type="checkbox"/> N/A <input type="checkbox"/> Already approved for DL* <input checked="" type="checkbox"/> Please Add ⁶ <input type="checkbox"/> Please Drop	
	*If already approved for DL, the Distance Learning Form must also be submitted <u>unless</u> the department affirms (by checking this box <input type="checkbox"/>) that the proposed changes do not affect DL delivery.		
l.	Current Supplementary Teaching Component, if any:	<input type="checkbox"/> Community-Based Experience <input type="checkbox"/> Service Learning <input type="checkbox"/> Both	
	Proposed Supplementary Teaching Component:	<input type="checkbox"/> Community-Based Experience <input type="checkbox"/> Service Learning <input type="checkbox"/> Both	
3.	Currently, is this course taught off campus?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	Proposed to be taught off campus?	YES <input type="checkbox"/>	NO <input type="checkbox"/>
4.	Are significant changes in content/teaching objectives of the course being proposed?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES, explain and offer brief rationale: _____		
5.	Course Relationship to Program(s).		
a.	Are there other depts and/or pgms that could be affected by the proposed change?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES, identify the depts. and/or pgms: _____		
b.	Will modifying this course result in a new requirement ⁷ for ANY program?	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
	If YES ⁷ , list the program(s) here: _____		
6.	Information to be Placed on Syllabus.		
a.	<input type="checkbox"/> Check box if changed to 400G or 500.	If changed to 400G- or 500-level course you must send in a syllabus and you must include the differentiation between undergraduate and graduate students by: (i) requiring additional assignments by the graduate students; and/or (ii) establishing different grading criteria in the course for graduate	

⁶ You must *also* submit the Distance Learning Form in order for the course to be considered for DL delivery.

⁷ In order to change a program, a program change form must also be submitted.

COURSE CHANGE FORM

			students. (See SR 3.1.4.)
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COURSE CHANGE FORM

Signature Routing Log

General Information:



Course Prefix and Number: PGY 603

Proposal Contact Person Name: Francisco H. Andrade Phone: 323 6576 Email: paco.andrade@uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
Department of Physiology	07/11/12	Michael B. Reid, Ph.D., Chair / 323-6045 / michael.reid@uky.edu	
Curriculum Comm	8/6/12	Brandi Stocker / 75286 / brandi.tauffener@uky.edu	
Faculty Council	10-1-12 (e-vote)	Brian Jackson 74905	
UKCOM Dean's office	10-10-12	Dr. Fred deBeer / 35079 / faymcclain@uky.edu	
		/ /	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ⁸
Undergraduate Council			
Graduate Council			
Health Care Colleges Council	11/20/2012	Cynthia Beeman, Chair	
Senate Council Approval		University Senate Approval	

Comments:

⁸ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

Distance Learning Form

This form must accompany every submission of a new/change course form that requests distance learning delivery. This form may be required when changing a course already approved for DL delivery. **All fields are required!**

Introduction/Definition: For the purposes of the Commission on Colleges Southern Association of Colleges and Schools accreditation review, *distance learning* is defined as a formal educational process in which the majority of the instruction (interaction between students and instructors and among students) in a course occurs when students and instructors are not in the same place. Instruction may be synchronous or asynchronous. A distance learning (DL) course may employ correspondence study, or audio, video, or computer technologies.

A number of specific requirements are listed for DL courses. **The department proposing the change in delivery method is responsible for ensuring that the requirements below are satisfied at the individual course level.** It is the responsibility of the instructor to have read and understood the university-level assurances regarding an equivalent experience for students utilizing DL (available at <http://www.uky.edu/Faculty/Senate/forms.htm>).

Course Number and Prefix: PGY 603	Date: 07/11/12
Instructor Name: Francisco H. Andrade, Ph.D.	Instructor Email: paco.andrade@uky.edu
Check the method below that best reflects how the majority of course of the course content will be delivered.	
Internet/Web-based <input checked="" type="checkbox"/>	Interactive Video <input type="checkbox"/>
	Hybrid <input type="checkbox"/>

Curriculum and Instruction	
1.	<p>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?</p> <p>The syllabus explains how to contact the instructor (email and phone) and expected response times. During the semester, participants (instructor and students) will use the Discussion area in Blackboard to post and answer questions, and to explore the lecture and reading materials in greater detail.</p>
2.	<p>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.</p> <p>The course goals and content are the same as for a typical classroom-based course. Writing assignments and final project are as challenging as for any comparable course.</p> <p>To ensure the highest production quality possible, the lectures are designed with the advice of the Distance Learning Program staff.</p>
3.	<p>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.</p> <p>The syllabus includes a whole section on academic integrity and the subject will be addressed in the first lecture. The course uses Blackboard, which requires username/password for access to all materials. There are four writing assignments (each 1-2 pages long) on topics assigned by the instructor.</p> <p>The final project is a longer essay on a topic chosen by each student from a list provided halfway through the course. Suspicious writing assignments and final projects will be analyzed with "SafeAssign", a plagiarism-detecting tool in Blackboard.</p>
4.	<p>Will offering this course via DL result in at least 25% or at least 50%* (based on total credit hours required for</p>

Abbreviations: TASC = Teaching and Academic Support Center DL = distance learning DLP = Distance Learning Programs

Distance Learning Form

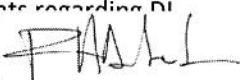
This form must accompany every submission of a new/change course form that requests distance learning delivery. This form may be required when changing a course already approved for DL delivery. **All fields are required!**

	<p>completion) of a degree program being offered via any form of DL, as defined above? No. If yes, which percentage, and which program(s)? <i>n/a</i> *As a general rule, if approval of a course for DL delivery results in 50% or more of a program being delivered through DL, the effective date of the course's DL delivery will be six months from the date of approval.</p>
5.	<p>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?</p> <p>The students taking this course will use the same resources as any other UK student: Blackboard and UK Library Services. Access is restricted by requiring username/password from any campus and home computer.</p>
<i>Library and Learning Resources</i>	
6.	<p>How do course requirements ensure that students make appropriate use of learning resources?</p> <p>This course is Blackboard-based; the students have to access it for lecture streaming and discussion. The students must use UK Library services to obtain the majority of the reading assignments and to search for references for the writing assignments and final project.</p>
7.	<p>Please explain specifically how access is provided to laboratories, facilities, and equipment appropriate to the course or program.</p> <p>Blackboard and UK Library services are accessible from any UK campus or home computer. Access is restricted to UK users (userID/password).</p>
<i>Student Services</i>	
8.	<p>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/)?</p> <p>Blackboard and UK Library services are accessible from any UK campus or home computer. Access is restricted to UK users (userID/password).</p>
9.	<p>Will the course be delivered via services available through the Academic Technology Group (ATG) and Distance Learning Programs (DLP)?</p> <p>Yes <input checked="" type="checkbox"/></p> <p>No <input type="checkbox"/></p> <p>If no, explain how students 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.</p>

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Distance Learning Form

This form must accompany every submission of a new/change course form that requests distance learning delivery. This form may be required when changing a course already approved for DL delivery. **All fields are required!**

10.	<p>Does the syllabus contain all the required components, below? <input checked="" type="checkbox"/> Yes</p> <ul style="list-style-type: none"> <input type="checkbox"/> Instructor's <i>virtual</i> office hours, if any. <input type="checkbox"/> The technological requirements for the course. <input type="checkbox"/> Contact information for Information Technology Customer Service Center: <ul style="list-style-type: none"> <input type="checkbox"/> Web: http://www.uky.edu/UKIT/ <input type="checkbox"/> Phone: 859-218-HELP € Web Address for Distance Learning Programs: http://www.uky.edu/DistanceLearning <input type="checkbox"/> Procedure for resolving technical complaints. <input type="checkbox"/> Preferred method for reaching instructor, e.g. email, phone, text message. <input type="checkbox"/> Maximum timeframe for responding to student communications. <input type="checkbox"/> Language pertaining academic accommodations: <ul style="list-style-type: none"> <input type="checkbox"/> "If you have a documented disability that requires academic accommodations in this course, please make your request to the University Disability Resource Center. The Center will require current disability documentation. When accommodations are approved, the Center will provide me with a Letter of Accommodation which details the recommended accommodations. Contact the Disability Resource Center, Jake Karnes, Director at 859-257-2754 or jkarnes@email.uky.edu." € Information on Distance Learning Library Services <ul style="list-style-type: none"> <input type="checkbox"/> Carla Cantagallo, DL Librarian <input type="checkbox"/> Web: http://libraries.uky.edu/DLLS <input type="checkbox"/> Phone: 859 257-0500, ext. 2171 <input type="checkbox"/> Email: carla@uky.edu <input type="checkbox"/> DL Interlibrary Loan Service: http://libraries.uky.edu/page.php?lweb_id=253
11.	<p>I, the instructor of record, have read and understood all of the university-level statements regarding DL</p> <p>Instructor Name: Francisco H. Andrade, Ph.D. Instructor Signature: </p>

Abbreviations: TASC = Teaching and Academic Support Center DL = distance learning DLP = Distance Learning Programs

**PGY 603 DESIGN AND ANALYSIS
(ONLINE SECTION)**

Instructor

Francisco H. Andrade, Ph.D.
Department of Physiology
MS581 Willard Medical Education Bldg.
Office phone: (859) 323-6576
E-mail: paco.andrade@uky.edu

Office hours

You can post questions and comments on the course's Discussion page on Blackboard. You may also contact me directly by e-mail; please include **PGY 603** in the subject line. I will respond within 24 hours (usually < 12 hours) on weekdays (M-F). It may take longer on weekends and holidays (but usually < 48 hours). If you wish to discuss the course materials in more detail, or have questions or concerns regarding the course in general or your grades, contact me by e-mail or phone to arrange an office appointment.

Blackboard

You must be able to access Blackboard (<http://uky.edu/blackboard> or <http://myUK.uky.edu>) for lectures, class questions and comments, assignments, and other course activities. You may also receive reminders and announcements via your UK e-mail account. If you do not use UK e-mail, you need to activate it and to check it regularly.

Contact UK Customer Service Center if you have questions or problems with Blackboard: phone 218-4357 (218-HELP) or send email to helpdesk@uky.edu. You can also find quick answers by clicking the *Help* link at the top of any Blackboard screen or going to the UK IT homepage (<http://www.uky.edu/UKIT>).

Course description

This is a course for students in the biomedical sciences interested in understanding the principles and pitfalls of experimental design and data analysis. The course focuses on why specific experimental design and analysis strategies are applied.

Course pre-requisites

Consent of instructor. An introductory statistics course is recommended.

Student learning outcomes

The objective of this course is to discuss and apply the principles of experimental design and data analysis in biomedical science. At the end of the course, you will be able to:

- (1) Design and justify the appropriate approach to an experimental question.
- (2) Assess the intellectual and methodological limitations of an experimental approach.
- (3) Explain the basic principles and pitfalls of data presentation and analysis.

Textbook

We use "Experimental Design for Biologists" by David J. Glass (Cold Spring Harbor Laboratory Press, 2007) for the first half of the course. Links to additional reading materials will be posted on Blackboard or will be available from journals via the UK Library. I assume you are familiar with UK Library services, including access to e-journals and databases (PubMed). If you need assistance with these resources, please use the Ask-a-Librarian service (<http://libraries.uky.edu/>) or the Distance Learning Library Services (<http://www.uky.edu/DistanceLearning>). For more information on Distance Learning Services, contact Carla Cantagallo, DL Librarian (<http://libraries.uky.edu/DLLS> , or carla@uky.edu, or (859) 257-0500, ext. 2171).

Course activities and assignments

This course relies on online lectures, reading assignments (access instructions on Blackboard), and online group discussions to explain the principles of experimental design and data analysis as they apply to biomedical science. Each lecture presents a specific topic, and the reading assignments expand or provide a different perspective on the subject. Reading assignments are taken from the textbook, reviews, or primary literature. I set up a Discussion page in Blackboard for class use: please post questions and comments as they occur to you. You may also send questions directly to me by e-mail; if appropriate, I will post your question and my answer on Blackboard.

Learning will be evaluated by four writing assignments, participation in the online discussions, and a final project. *There will not be a final exam.* Points will be awarded only for material turned in on time via Blackboard (or email to me if Blackboard is down). Assignments and final projects received after their respective deadline will get zero points. *Class schedule and deadlines are times and dates in Lexington KY, USA (Eastern Time Zone).* The date/time stamp on Blackboard or email will be the official submission time. E-mail failure or faulty Internet connection will not be valid excuses for sending your work after the deadline.

Assignments (10 points each, 40 points total): 4 short essays (1-2 pages not counting cover page or references, 1" margins all around, single-spaced, font: Times 12 or Arial 11) that present your perspective on a topic assigned by the instructor. You will have one week to complete each assignment, and must submit the file by 5pm on its scheduled date. The complete, organized, and logical discussion of the assigned topic will count for 7 points. Spelling, grammar and presentation will count for the rest (3 points).

Class discussions (20 points total): The richness of the discussion of the different topics will depend on the participation of all of us. You will get one point every time you post a relevant question or comment on Blackboard, but no more than two points per week, and up to a maximum of 20 points for the semester.

Final project (40 points total): A more extensive essay (6-8 pages not counting cover page or references, 1" margins all around, single-spaced, font: Times 12 or Arial 11) on a topic of your choice from a list given at the halfway mark of the semester. The final paper will be graded for organization, content and logic (30 points), grammar and spelling (10 points). *This final paper is due by 5pm the last day of classes.*

Grading

You can accumulate up to 100 points from all assignments, class discussion, and the final project. The final **letter grade** will be calculated from the total points accumulated according to the scale below:

		<u>Points</u>
A	<i>High achievement</i>	≥ 92
B	<i>Satisfactory achievement</i>	≥ 82
C	<i>Minimum passing grade</i>	≥ 72
E	<i>Failure</i>	< 72

NOTE: The grading scale does not include D because that grade may not be awarded to graduate students (see Graduate School bulletin).

The course evaluation will be available on Blackboard the last week of classes (week before finals week). I will add 5 points to your total if you complete the course evaluation before 5pm the last Friday of classes. There will be no other score adjustment or extra credit work.

General course policies

1. Attendance Policy

This is an online course: there is no attendance requirement. However, you must keep up with the

lecture and reading assignment schedule, and must turn in all assignments on time. Deadlines *may* be extended for excused absences only (see below).

2. **Submission of Assignments**

Assignments and final projects must be uploaded to Blackboard. If Blackboard is inaccessible, you may send the file by email to paco.andrade@uky.edu. Please write **PGY 603** in the Subject line and a short description of the attached file in the body of the email. The date/time stamp on Blackboard or the e-mail received will be the official submission time. Plan ahead: e-mail failure or faulty Internet connection will NOT excuse you for being late. *Any assignment received past its deadline will receive zero points.*

3. **Return of Graded Materials**

Electronic copies of your graded materials (assignments and final paper) will be sent to your UK e-mail address. In accordance with University procedures, all graded materials will be held for 1 semester after the end of the course.

4. **Questions Regarding Scores or Grades**

Assignment scores will be posted on Blackboard as soon as they are available. If you have a concern regarding your posted score/grade, you have 1 week (7 days) from the day the scores are posted to contest the score. After 1 week, the score will not be changed. It is your responsibility to check your scores and follow-up in a timely manner. If you feel there was an error in grading your assignment, you must submit your request by e-mail, detailing the perceived error and why you should receive additional credit. For instance, if there is information in the reading materials that supports your answer, quote the information and provide the reference, including the page and paragraph number.

5. **Rescheduling Assignments**

Students with documented excusable absences are allowed to make up missed assignments according to these guidelines:

For excused non-emergencies, you must notify me by e-mail at least 1 week (7 days) before.

For emergency-related absences, you must notify me by e-mail no later than 48 hours after the missed assignment. Acceptable documentation must be submitted no later than 3 days after a missed assignment. Excused missed work must be completed within 1 week (7 days) of the original due date, unless other arrangements have been made with me.

You are encouraged to take an incomplete in the course if you miss two assignments.

In all cases, you must present a doctor's note, or other suitable documentation to me within 3 calendar days of missing any assignment.

There is no make-up date for the final project. If you miss its deadline, you will not be able to take an incomplete in the course without discussing with me the reasons for missing it, and then filling out and signing an incomplete form with the department. If I feel an incomplete is warranted, I will determine the conditions necessary to satisfy the incomplete at that time.

For excused and documented absences, this course adheres to the University policy as follows:

- A. Illness of the student or serious illness of a member of the student's immediate family. The instructor shall have the right to request appropriate verification.
- B. The death of a member of the student's immediate family. The instructor shall have the right to request appropriate verification.
- C. Trips for members of student organizations sponsored by an academic unit, trips for University classes, and trips for participation in intercollegiate athletic events. When

feasible, the student must notify the instructor prior to the occurrence of such absences, but in no case shall such notification occur more than 1 week after the absence.

Instructors may request formal notification from appropriate university personnel to document the student's participation in such trips.

- D. Major religious holidays. Students are responsible for notifying the instructor in writing of anticipated absences due to their observance of such holidays no later than the last day for adding a class.
- E. Any other circumstances for which the instructor finds reasonable cause for nonattendance. Students missing class work due to an excused absence bear the responsibility of informing the instructor about their excused absence within 1 week following the period of the excused absence (except where prior notification is required), and of making up the missed work. The instructor shall give the student an opportunity to make up the work and/or the exams missed due to an excused absence, and shall do so, if feasible, during the semester in which the absence occurred.

Your failure to follow this policy will result in **zero points** for the missed assignment. **Note:** Topics for make-up assignments may be different from the original.

6. Academic Integrity

You shall not plagiarize, cheat, or falsify or misuse academic records. All students are expected to adhere to University policy on cheating and plagiarism in all courses. The minimum penalty for a first offense is a zero on the assignment on which the offense occurred. If the offense is considered severe or the student has other academic offenses on their record, more serious penalties, up to suspension from the university may be imposed. **When in doubt, ask me!** I will be happy to provide further guidance on what constitutes fair use of published material (or not.)

Plagiarism and cheating are serious breaches of academic conduct. You are advised to become familiar with the various forms of academic dishonesty as explained in the Code of Student Rights and Responsibilities. Complete information can be found at the following website:

<http://www.uky.edu/Ombud>. A plea of ignorance is not acceptable as a defense against the charge of academic dishonesty. It is important that you review this information as all ideas borrowed from others need to be properly credited.

Part II of *Student Rights and Responsibilities* (available online

<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.

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. Plagiarism also includes the practice of employing or allowing another person to alter or revise the work that a student submits as his/her own, whoever that other person may be.

Students may discuss assignments among themselves or with an instructor or tutor, but when the actual work is done, it must be done by the student and the student alone. When a student's assignment involves research in outside sources of information, the student must carefully acknowledge exactly what, where and how he/she employed them. If the words of someone else are used, the student must put quotation marks around the passage in question and add an

appropriate indication of its origin. Making simple changes while leaving the organization, content and phraseology intact is plagiaristic. However, nothing in these Rules shall apply to those ideas that are so generally and freely circulated as to be a part of the public domain (Section 6.3.1).

7. Class Behavior, Decorum and Civility

As a student engaging in a myriad of intellectual pursuits, you are expected to maintain a level of dignity and respect towards faculty, staff, and fellow students. You are expected to value differences among all members of our academic community. You have the right to take reasoned exception and to voice opinions contrary to those offered by the instructor and/or other students (S.R. 6.1.2).

Equally, a faculty member has the right -- and the responsibility -- to ensure that all academic discourse occurs in a context characterized by respect and civility. Acceptable decorum and civility does not include attacks of a personal nature or statements denigrating another on the basis of race, sex, religion, sexual orientation, age, national/regional origin.

8. Disabilities and medical conditions

If you have a documented disability that requires academic accommodation in this course, please make your request to the University Disability Resource Center. The Center will require current disability documentation. When accommodations are approved, the Center will provide me with a Letter of Accommodation, which details the recommended accommodations. Contact the Disability Resource Center, Jake Karnes, Director, at (859) 257-2754 or jkarnes@email.uky.edu.

COURSE OUTLINE

Session	Topic
1	Introduction: course outline and expectations
2	Defining the experimental program
3	The hypothesis as a framework for science
4	When a hypothesis just won't do
5	Problem => Question: Inductive reasoning
6	Answers and conclusions: model building
7	Assignment #1
8	Establishing a system for experimentation
9	Designing the experiment
10	Validating the model with real data
11	Controls: positive and negative
12	Controls: accounting for your bias
13	Biological empiricism
14	Assignment #2
15	Data exploration: a first look at your results
16	Data => statistics => Conclusions
17	Showing results and variation
18	Data distributions
19	One or two sample hypotheses
20	Comparing multiple sample: analysis of variance
21	Assignment #3
22	Experiments with multiple factors
23	Linear regression and correlation
24	Of mutant mice: Chi-square and problems of frequencies
25	Non-parametric tests: when assumptions fail
26	Presenting your results
27	Assignment #4
28	Final paper due