

REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

1. General Information

College: <u>Agriculture</u>		Department: <u>Interdepartmental</u>	
Current Major Name: <u>Agricultural Biotechnology</u>		Proposed Major Name: _____	
Current Degree Title: <u>BS</u>		Proposed Degree Title: _____	
Formal Option(s): _____		Proposed Formal Option(s): _____	
Specialty Field w/in Formal Option: _____		Proposed Specialty Field w/in Formal Options: _____	
Date of Contact with Associate Provost for Academic Administration ¹ : <u>12/17/2009</u>			
Bulletin (yr & pgs): <u>07-08, 83-85</u>		CIP Code ¹ : <u>26.1201</u>	
Today's Date: <u>12/30/2009</u>			
Accrediting Agency (if applicable): <u>N/A</u>			
Requested Effective Date: <input checked="" type="checkbox"/> Semester following approval. OR <input type="checkbox"/> Specific Date ² : _____			
Dept. Contact Person: <u>Daniel K. Howe</u>		Phone: <u>257-4757 x81113</u> Email: <u>dkhowe2@uky.edu</u>	

2. University Studies Requirements or Recommendations for this Program.

	Current	Proposed
I. Mathematics	_____	_____
II. Foreign Language	_____	_____
III. Inference-Logic	<u>MA123 and MA132 OR MA113</u>	<u>MA123 and MA132 OR MA113 OR MA137</u>
IV. Written Communication	<u>ENG 104 or Honors</u>	_____
V. Oral Communication	<u>Suspended through Fall 2009</u>	<u>Suspended through Fall 2009</u>
VI. Natural Sciences	_____	_____
VII. Social Sciences	_____	_____
VIII. Humanities	_____	_____
IX. Cross-Cultural	_____	_____
X. USP Electives (3 must be outside the student's major)	_____	_____

3. Explain whether the proposed changes to the program (as described in sections 4 to 12) involve courses offered by another department/program. Routing Signature Log must include approval by faculty of additional department(s).

MA 137, Calculus I for the life sciences, is a new course that is being offered by the Dept. of Mathematics (syllabus attached). STA 570, Basic Statistical Analysis, and STA 580, Biostatistics I, are offered by the Dept. of Statistics.

4. Explain how satisfaction of the University Graduation Writing Requirement will be changed.

¹ Prior to filling out this form, you MUST contact the Associate Provost for Academic Administration (APAA). If you do not know the CIP code, the (APAA) can provide you with that during the contact.

² Program changes are typically made effective for the semester following approval. No program will be made effective until all approvals are received.

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Current <input type="checkbox"/> Standard University course offering. List: _____	Proposed <input type="checkbox"/> <i>Standard University course offering.</i> List: _____
<input type="checkbox"/> Specific course – list: _____	<input type="checkbox"/> <i>Specific course) – list: _____</i>

5. List any changes to college-level requirements that must be satisfied.

Current <input type="checkbox"/> Standard college requirement. List: _____	Proposed <input type="checkbox"/> <i>Standard college requirement.</i> List: _____
<input type="checkbox"/> Specific required course – list: _____	<input type="checkbox"/> <i>Specific course – list: _____</i>

6. List pre-major or pre-professional course requirements that will change, including credit hours.

Current	Proposed
_____	_____

7. List the major's course requirements that will change, including credit hours.

Current	Proposed
STA 291	STA 291 OR STA 570 OR STA 580

8. Does the pgm require a minor AND does the proposed change affect the required minor? N/A Yes No
 If "Yes," indicate current courses and proposed changes below.

Current	Proposed
_____	_____

9. Does the proposed change affect any option(s)? N/A Yes No
 If "Yes," indicate current courses and proposed changes below, including credit hours, and also specialties and subspecialties, if any.

Current	Proposed
_____	_____

10. Does the change affect pgm requirements for number of credit hrs outside the major subject in a related field? Yes No
 If so, indicate current courses and proposed changes below.

Current	Proposed
_____	_____

11. Does the change affect pgm requirements for technical or professional support electives? Yes No
 If so, indicate current courses and proposed changes below.

Current	Proposed
_____	_____

12. Does the change affect a minimum number of free credit hours or support electives? Yes No
 If "Yes," indicate current courses and proposed changes below.

REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

Current	Proposed

13. Summary of changes in required credit hours:

	Current	Proposed
a. Credit Hours of Premajor or Preprofessional Courses:	43-45	43-45
b. Credit Hours of Major's Requirements:	32-33	32-33
c. Credit Hours for Required Minor:	N/A	_____
d. Credit Hours Needed for a Specific Option:	N/A	_____
e. Credit Hours Outside of Major Subject in Related Field:	N/A	_____
f. Credit Hours in Technical or Professional Support Electives:	N/A	_____
g. Minimum Credit Hours of Free/Supportive Electives:	10	10
h. Total Credit Hours Required by Level:	100:	_____
	200:	_____
	300:	_____
	400-500:	_____
i. Total Credit Hours Required for Graduation:	132	132

14. Rationale for Change(s) – if rationale involves accreditation requirements, please include specific references to that.

The requested changes to the ABT program will provide more options to students for their USP Inference-Logic requirement and for the Major requirement in Statistics.

15. List below the typical semester by semester program for the major. If multiple options are available, attach a separate sheet for each option.

YEAR 1 – FALL: (e.g. "BIO 103; 3 credits")	<u>See attached example curricula</u>	YEAR 1 – SPRING:	_____
YEAR 2 - FALL :	_____	YEAR 2 – SPRING:	_____
YEAR 3 - FALL:	_____	YEAR 3 - SPRING:	_____
YEAR 4 - FALL:	_____	YEAR 4 - SPRING:	_____

REQUEST FOR CHANGE IN UNDERGRADUATE PROGRAM

Signature Routing Log

General Information:

Current Degree Title and Major Name: BS in Agricultural Biotechnology

Proposal Contact Person Name: Daniel K. Howe

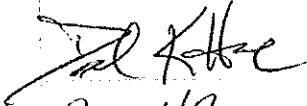
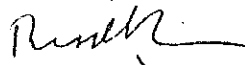


Phone: 7-4757
x81113

Email: dkhowe2@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
ABT Coordinating Committee	9/11/2009	Daniel K. Howe / 7-4757 x81113 / dkhowe2@uky.edu	
Dept. of Mathematics	6 Jan 2010	Russell M. Brown / 7-3851 / Russell.Brown@uky.edu	
Dept. of Statistics	01/07/10	Arnold J. Stromberg / 7-6903 / stromberg@uky.edu	
UCC of COA	02/12/10	Larry J. Grabow 17-1885 lgrabow@esp1.uky.edu	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ³
Undergraduate Council	3/30/2010		
Graduate Council			
Health Care Colleges Council			
Senate Council Approval			
University Senate Approval			

Comments:

³ Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

Example Curriculum for Students taking
MA 108R in their first year

<u>Fall year 1</u>	
MA 108R	3
ABT 101	1
GEN 100	3
ENG 104	4
USP - 1	3
Total	14

<u>Spring Year 1</u>	
MA 109	3
USP - 2	3
USP - 3	4
USP - 4	3
USP - 5	3
Total	16

<u>Fall Year 2</u>	
MA 123	3
CHE 105	3
CHE 111	2
CHE 193	1
STA 291	3
ABT 201W	1
Total	13

<u>Spring Year 2</u>	
MA 132	3
CHE 107	3
CHE 113	2
CHE 195	1
BIO 150	3
BIO 151	2
Total	14

<u>Fall Year 3</u>	
CHE 230	3
CHE 231	2
BIO 152	3
BIO 153	2
ABT 360 ¹	3
ABT301W	2
Total	15

<u>Spring Year 3</u>	
CHE 232	3
CHE 233	2
BIO 308	3
BIO 209	2
SS-1	3
SS-2	3
Total	16

<u>Fall Year 4</u>	
PHY 211	5
BCH 401	3
SS-3	3
ABT 495	4
Total	15

<u>Spring Year 4</u>	
ABT 395	4
ABT 460	3
ABT 461	3
SS-4	3
Elective	3
Total	16

<u>Fall Year 5</u>	
PHY 213	5
SS - 5	3
SS - 6	3
SS - 7	4
Total	16

Grand Total 135 Credits

¹BIO 304 can substitute

Example Curriculum for Students taking
MA 109 in their first year

Fall year 1

MA 109	3
ABT 101	1
GEN 100	3
ENG 104	4
USP - 1	3
USP - 2	3
Total	17

Spring Year 1

CHE 105	3
CHE 111	2
CHE 193	1
MA 123	3
USP - 3	3
USP - 4	4
Total	16

Fall Year 2

CHE 107	3
CHE 113	2
CHE 195	1
BIO 150	3
BIO 151	2
STA 291	3
ABT 201W	1
USP - 5	3
Total	18

Spring Year 2

CHE 230	3
CHE 231	2
CHE 295	1
MA 132	3
BIO 152	3
Elective	3
SS-1	3
Total	18

Fall Year 3

BIO 153	2
CHE 232	3
CHE 233	2
ABT301W	2
SS-2	3
ABT 360 ¹	3
Total	15

Spring Year 3

PHY 211	5
BIO 308	3
BIO 209	2
ABT 461	3
SS-3	3
Total	16

Fall Year 4

PHY 213	5
BCH 401	3
ABT 395	4
ABT 495	4
Total	16

Spring Year 4

ABT 460	3
SS-4	4
SS-5	3
SS-6	3
SS-7	3
Total	16

Grand Total 132 Credits

¹BIO 304 can substitute

Example Curriculum for Students taking
MA 123 in their first year

Fall year 1

MA 123	3
ABT 101	1
GEN 100	3
CHE 105	3
CHE 111	2
CHE 193	1
ENG 104	4
Total	17

Spring Year 1

CHE 107	3
CHE 113	2
BIO 150	3
BIO 151	2
MA 132	3
USP - 1	3
Total	16

Fall Year 2

CHE 230	3
CHE 231	2
BIO 152	3
BIO 153	2
USP-2	3
ABT 201W	1
USP -3	3
Total	17

Spring Year 2

CHE 232	3
CHE 233	2
SS-1	3
BIO 308	3
BIO 209	2
USP - 4	3
Total	16

Fall Year 3

PHY 211	5
Elective	3
ABT 360 ¹	3
ABT301W	2
STA570 or STA 580 ²	4/3
Total	17/16

Spring Year 3

PHY 213	5
ABT 461	3
SS-2	3
SS-3	3
USP - 5	3
Total	17

Fall Year 4

BCH 401	3
ABT 395	3/4
ABT 495	4
SS-4	3
Elective	3
Total	16/17

Spring Year 4

ABT 460	3
SS-5	3
SS-6	3
SS-7	4
Elective	3
Total	16

Grand Total 132 Credits

¹BIO 304 can substitute

²Students should consult with the
Director of Undergraduate Studies in the
Statistics Department

Example Curriculum for Students taking
MA 113 or MA 137 in their first year

Fall year 1

MA 113/137	4
ABT 101	1
GEN 100	3
CHE 105	3
CHE 111	2
ENG 104	4
Total	17

Spring Year 1

CHE 107	3
CHE 113	2
BIO 150	3
BIO 151	2
USP - 1	3
USP - 2	3
Total	16

Fall Year 2

CHE 230	3
CHE 231	2
BIO 152	3
BIO 153	2
USP - 3	3
ABT 201W	1
USP - 4	3
Total	17

Spring Year 2

CHE 232	3
CHE 233	2
SS-1	3
BIO 308	3
BIO 209	2
SS - 2	3
Total	16

Fall Year 3

PHY 211	5
Elective	3
ABT 360 ¹	3
ABT301W	2
STA 570 or	
STA 580 ²	4/3
Total	17/16

Spring Year 3

PHY 213	5
ABT 461	3
SS-3	3
Elective	3
USP - 5	3
Total	17

Fall Year 4

BCH 401	3
ABT 395	3/4
ABT 495	4
SS-4	3
Elective	3
Total	16/17

Spring Year 4

ABT 460	3
SS-5	3
SS-6	3
SS-7	3
Elective	4
Total	16

Grand Total 132 Credits

¹BIO 304 can substitute

²Students should consult with the
Director of Undergraduate Studies in the
Statistics Department

MA 137 001 Calculus I for the life sciences.

Time: MWF 9-9:50, lecture, TR 9:30-10:20 recitation.

Instructor: Alberto Corso

Office: 701 Patterson Office Tower

Mailbox: 715 Patterson Office Tower

Phone: 859 257-3167 (or 859 257-3336 to leave a message)

Email: corso@ms.uky.edu

Office Hours: TR 11:00–12:15, and by appointment.

Course overview: In Calculus I for the life sciences, we will learn about derivatives, integrals and the fundamental theorems of calculus. We begin by introducing the notion of a limit. Limits are essential to defining derivatives and integrals. By the end of the semester students should know precise definitions of the derivative and the integral and the fundamental theorem of calculus which gives the relation between the derivative and the integral. We will illustrate the methods and ideas of calculus by studying several problems from biology. We will learn the interpretation of the derivative as a rate of change, and model growth and declines of populations.

Student learning outcomes:

Students will compute fluently.

Students will apply the methods of calculus in new contexts to solve unfamiliar problems.

Students will write correct justifications for their solutions to problems.

Course outline

Preview and review

 Preliminaries, elementary Functions, and graphing

Discrete time models, sequences, and difference equations

 Exponential growth and decay

 Sequences

 More population models

Limits and continuity

 Limits

 Continuity

 Limits at infinity

 The Sandwich Theorem and some trigonometric limits

 Properties of continuous functions

Differentiation

- Formal definition of the derivative
- The power rule, the basic rules of differentiation, and the derivatives of polynomials
- The product and quotient rules, and the derivatives of rational and power functions
- The chain rule and higher derivatives
- Derivatives of trigonometric functions
- Derivatives of exponential functions
- Derivatives of inverse and logarithmic functions
- Approximations and local linearity

Applications of differentiation

- Extrema and the Mean Value Theorem
- Monotonicity and Concavity
- Extrema, inflection points, and graphing
- Optimization
- L'Hospital's rule
- Difference equations: stability

Integration

- The definite integral
- The Fundamental Theorem of Calculus
- Applications of integration

Text: *Calculus for Biology and Medicine* by Claudia Neuhauser.

Class Attendance and Participation: This class is designed for active involvement of the students. You will be actively supporting each other as you gain experience and understanding. Multiple ideas and points of view are important. You will benefit from hearing others' approaches to problem solving, and they will benefit from you. So attendance and active participation are expected and contribute toward your grade.

Homework: There will be regular homework assignments. Weekly quizzes will be given that are taken from the homework.

Examinations: There will be three examinations and a final.

Grading:

Class attendance and participation	10%
Homework quizzes	10%
Exams	60%
Final	20%

Grading scale:

Lowest A	90%.
Lowest B	80%
Lowest C	70%
Lowest D	60%
E	Below 60%

Working Together: Students are encouraged to work together on homework, however, they must be sure to master the material from their collaborative work. It would be best for your own understanding if you put aside your notes from the discussions with your classmates and wrote up the solutions entirely from scratch. Working together on exams, of course, is expressly forbidden.

Absences: See Students Rights and Responsibilities,

www.uky.edu/StudentAffairs/Code/part2.html,

Section 5.4.2.2, for information about valid excused absences and their verification, and making up of missed assignments.

Cheating: Cheating and plagiarism can lead to significant penalties. See Sections 6.3 and 6.4 of Student Rights and Responsibilities,

www.uky.edu/StudentAffairs/Code/part2.html.

Expectations: I expect that everyone will maintain a classroom conducive to learning. I like an informal atmosphere, but it must be orderly. Thus, everyone is expected to behave with basic politeness, civility, and respect for others. In particular, talking in class is OK if it's part of a class discussion or directed to me. Private communications are not, especially during quizzes and tests. Neither are reading extraneous materials, using electronic equipment, or sleeping.

Accommodations for students with disabilities: If you have a documented disability that requires academic accommodations, please see me as soon as possible during scheduled office hours. In order to receive accommodations in this course, you must provide me with a Letter of Accommodation 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."

Suggestions: Suggestions for improvement are welcome at any time. Any concern about the course should be brought first to my attention. Further recourse is available through the offices of the Department Ombud and the Department Chair, both accessible from the Main Office in 715 Patterson Office Tower.

Syllabus

STA570 401-402, Basic Statistical Analysis

University of Kentucky, Spring 2007

Instructor: Kert Viele
Office: 803 Patterson Office Tower
Phone: 257-4803
E-mail: viele@ms.uky.edu
Office Hours: Whenever I'm in
Lectures: TR 6:00-7:15, CB 201
Labs: Sec 401 M 6:00-7:50pm CB307 , Sec 402 M 8:00-9:50pm CB307
Text: Fundamentals of Biostatistics, by Bernard Rosner
Lab Instructor: Chris Hammons, 859 POT, 257-4423, hammons@ms.uky.edu
Course Web Page: <http://www.ms.uky.edu/~viele/sta570s07/sta570.html>

Overview

This course provides an introduction to many basic statistical techniques for the analysis of quantitative data, including exploratory data analysis, the normal distribution, estimation, hypothesis testing, regression, analysis of variance, and analysis of categorical data. Much of our discussion will consist of determining which of these many techniques is appropriate for a particular experiment, and how to design an experiment in advance to be sure you'll actually get relevant answers. Finally, in the lab sections we will discuss how to use SAS Analyst, a graphical user interface for SAS, to implement the techniques discussed in lecture.

Grading

I will assign approximately weekly homeworks (avoiding weeks with exams, for example). Most weeks will also have a lab assignment. The homeworks are worth 20% of the grade and the lab exercises are worth 20% of the grade. Homeworks will be graded on a traditional percentage scale, but the lab exercises will only be graded as either "check" (50%), "check-plus" (100%), or "check-minus" (0%). The "check-minus" will only be given for not showing up to lab or leaving the lab unfinished. Note that receiving a "check-plus" does not indicate you did everything perfectly, simply that you got most answers correct. Considering you will have the lab instructor available in lab to help, my hope is that everyone will have a perfect lab grade at the end of the semester. Homeworks may be emailed electronically in Word or turned in on paper in class on the due date. Lab assignments must be emailed in Word at the completion of the lab session.

There will be two exams, a midterm (Feb. 27 in class) and a final (Tuesday, May 1, 6:00-8:00pm). Each of these exams will be worth 30% of the course grade.

The course percentage will translate into a letter grade according to the scale 90-100=A, 80-89=B, 70-79=C, 60-69=D (exception - for undergraduate students 60-69 corresponds to a D, graduate students are not eligible for D's). These are minimum requirements, thus, interpret 80-89 as "at least a B".

Late homework and other missed work may only be made up in the case of a university excused absence. Attendance is required to the extent that any student missing 20% of the course for any reason may be asked to withdraw at the discretion of the instructor. If you will be missing any days due to religious holidays, the instructor must be informed in writing by the end of the add period.

Biostatistics I

University of Kentucky

STA 580, Fall 2009

Credit: 3.0

Lecture:	3:30 p.m - 5:20 p.m., Thursday Room 0014, Charles T. Wethington Building
Laboratory, Section 001:	6:00 p.m - 7:50 p.m., Thursday Room 602J, College of Nursing
Laboratory, Section 002:	3:30 p.m - 5:20 p.m., Monday Room 602J, College of Nursing

Instructor: Patrick Breheny, Ph.D.
Office: Room 203C, College of Public Health
Phone: 218-2077
e-mail: patrick.breheny@uky.edu
Office hours: 1:00 p.m - 4:00 p.m., Tuesday

Teaching Assistant: Yinglei Li
Office: Room 818, Patterson Office Tower
Phone: 257-6915
e-mail: yinglei.li@uky.edu
Office hours: To be announced

Course description: STA 580 is an introductory course that covers basic statistics concepts and methods used in medicine, public health, and the biological sciences. The objectives for this course are for you to be able to:

- Think statistically -- to understand the importance of collecting data and using appropriate statistical methods in order to test hypotheses and conduct research
- Recognize the strengths and limitations of basic statistical techniques
- Conduct analyses using those techniques
- Better comprehend journal articles containing statistical analyses
- Have the necessary background to enroll in Biostatistics II (CPH 630)

Text: B. Rosner (2006): *Fundamentals of Biostatistics (Sixth Edition)*. Duxbury: Belmont, CA.

Prerequisite: College algebra.

Course website: The course notes, assignments, data sets, and other relevant materials will be made available on the course web site:

<http://web.as.uky.edu/statistics/users/pbreheny/580/index.html>

Homework: There will be one homework assignments per week, due two weeks later (*i.e.*, homework assigned the day of lecture #1 will be due the day of lecture #3). Homework will be returned and discussed during the laboratory sections. Late homework will not be accepted; however, I will drop your lowest homework score in determining your grade.

You are encouraged to work in groups of two or three, and turn in one copy of the homework per group. This will make Yinglei's life much easier.

Computing: Homework for this course will involve the use of a computer for data analysis. You may use any statistical software you would like for this analysis, although the software package that will be covered in lab is SAS. For a list of computer labs on campus that have SAS available, go to http://www.uky.edu/SCS/software/windows_software.pdf. If you would like to use SAS on your home computer or laptop, you may also purchase a one-year license from SSTARS (see me for details).

You will be asked to perform arithmetic calculations on exams, so please bring a scientific calculator with you to the midterm and final.

Exams: There will be two exams in this class, of equal weight. Exams will be given on the following dates in our regular classroom (Room 0014, Wethington Building):

	Date	Time
Midterm Exam	Thursday, October 15	3:30 p.m.-5:30 p.m.
Final Exam	Tuesday, December 15	3:30 p.m.-5:30 p.m.

Grading: Your grade will be based on a weighted average of homework (30%) and the two exams (35% each).

Attendance: Regular attendance in this course is expected, and will be taken into account in determining borderline grades.

Electronic communication: I may occasionally send notices to the class through e-mail (to the account listed for you in the campus directory), so please check that account regularly.

Cheating: The University of Kentucky takes cheating on examinations very seriously. Besides the haunting, lifelong feelings of guilt, there are rather severe academic sanctions, a summary of which can be found at <http://www.uky.edu/Ombud/acadoffenses/index.htm>

Complaints: Students with suggestions or complaints should see me first, and if we cannot come to an agreement, I will direct you to the head of the department.

Disabilities: If anyone has a disability requiring special accommodations, please let me know as soon as possible, so that these arrangements can be made.

Competencies: Students pursuing an MPH degree may be interested in the ASPH competencies addressed by this course. These may be found by looking at the online version of this syllabus, available at <http://web.as.uky.edu/statistics/users/pbreheny/580/syllabus.pdf>

I look forward to getting to know all of you, and I hope we have a great semester together.

Course schedule:

Date	Topics
August 27	Introduction; Experimental design. NO LABS THIS WEEK.
September 3	Descriptive statistics: graphical and numerical summaries.
September 10	Probability
September 17	Distributions
September 24	The law of averages and the central limit theorem
October 1	Hypothesis tests and confidence intervals: concepts
October 8	One-sample inference: percentages
October 15	MIDTERM EXAM. NO LABS THIS WEEK.
October 22	One-sample inference: continuous measurements
October 29	Two-sample inference: categorical data
November 5	Two-sample inference: continuous data; power and sample size
November 12	Randomization methods; transformations; rank-based methods
November 19	Correlation and regression
November 26	THANKSGIVING. NO LABS THIS WEEK.
December 3	Survival analysis
December 10	Multiple comparisons and ANOVA
December 15	FINAL EXAM. NO LABS THIS WEEK.

ASPH competency attainment for STA 580 – Biostatistics I

Key:

Competency level	Number	Description
Unaware	0	No information or skill in this area
Aware	1	Able to identify the concept or skill but with limited ability to perform or apply it independently
Knowledgeable	2	Able to apply and describe the concept or skill
Proficient	3	Able to synthesize, critique, or teach the concept or skill

Biostatistics competencies attained:

Competency	Level attained
Describe the roles biostatistics serves in the discipline of public health	2
Distinguish among the different measurement scales and the implications for selection of statistical methods to be used based on these distinctions	2
Apply descriptive techniques commonly used to summarize public health data	2
Describe basic concepts of probability, random variation, and commonly used statistical probability distributions	2
Apply common statistical methods for inference	2
Describe preferred methodological alternatives to commonly used statistical methods when assumptions are not met	2
Apply descriptive and inferential methodologies according to the type of study design for answering a particular question	2
Interpret results of statistical analyses found in public health studies	2
Develop written and oral presentations based on statistical analyses for both public health professionals and educated lay audiences	1
Apply basic informatics techniques with vital statistics and public health records in the description of public health characteristics and in public health research and evaluation	1

Meeting Minutes
ABT Coordinating Committee
1:00 PM, 9/11/2009, S-201 Ag Sciences Bldg

Attendees: Dan Howe (Chair), Sharyn Perry (Co-DUS), Michael Goodin (Co-DUS), Trevor Creamer, Seth DeBolt, Jamie Matthews, Craig Vander Kooi, Ling Yuan, Esther Fleming (Administrative Asst.)

1. Program Status

Information was provided by Esther Fleming regarding ABT student enrollment/presentations/graduations current course offerings, and faculty involvement (instructors/advisors/research mentors). It was mentioned that two new faculty members, Joe Zhou in Entomology and Luke Moe in Plant and Soil Sciences, have committed to teaching ABT courses.

2. Potential curriculum additions/changes

- a. Calculus I for the Life Sciences (MA 137), a new course being added by the Department of Mathematics, was discussed as an option to satisfy the Inference-Logic requirement. Sharyn Perry had met with Russell Brown (Mathematics DUS), and he said that the course would be taught at about the level of MA 113. Addition of MA 137 as an option to satisfy the Inference-Logic requirement was approved unanimously, pending confirmation that professional program entry requirements are met.
- b. Dave Watt, Dept. of Biochemistry, has proposed to create a new one-semester organic chemistry course, to be paired with the current one-semester biochemistry course, which would cover the essential topics of organic chemistry and biochemistry normally covered in three semesters. The two-semester sequence would be called "Organic and Biochemistry" with the intent that it would meet the needs of ABT students and a number of pre-professional programs. This new course series could be offered through the ABT program. The issue of a companion laboratory course for this two-semester sequence was discussed, particularly from the standpoint of whether this would be critical for satisfying entry requirements for various professional programs (e.g., pre-Veterinary, pre-Dental, etc.). Uncertainties still need to be resolved, but the idea for this two-semester chemistry offering was considered appealing. The committee supported

asking Dr. Watt to go forward with his efforts to develop the proposed course series for ABT.

- c. STA 580, Biostatistics I, was discussed as an option to satisfy the ABT major requirement in Statistics. This proposal was approved.
- d. The need for a Spring section of ABT 495 was discussed. Joe Chappell had previously taught both a Fall and Spring section, but had stopped offering the course in the Spring because of lower enrollment and the time commitment necessary to teach the course both semesters. It was generally agreed that a Spring offering would be beneficial. Luke Moe, the new faculty member in Plant and Soil Sciences who will have ABT teaching responsibilities, was proposed as an instructor for this course.
- e. The need for a 300 level laboratory techniques course was discussed. There was a consensus that this would be beneficial for ABT students and would reduce the need for Joe Chappell to cover very basic concepts and techniques in the ABT 495 course. Joe Zhou, Entomology, was proposed as an instructor for this new course.

3. ABT Masters degree program

- a. A proposal was introduced from Bruce Webb to develop a "Science Masters Program" that might be tied to an ABT Master program, which has been discussed in the past. Information was preliminary, so discussions about the new program were limited and no actions were taken.

**Minutes from "eMeeting" re: ABT minor program change
02/04/2009**

From: Howe, Daniel K
Sent: Thursday, February 04, 2010 11:42 AM
To: Vander Kooi, Craig W; Matthews, James C; Yuan, Ling; Goodin, Michael M; Seth DeBolt (seth.debolt@uky.edu); Perry, Sharyn; Creamer, Trevor P
Cc: Howe, Daniel K; Fleming, Esther E
Subject: STA 570

Hi Folks,

A minor question has been raised re: our ABT program change request that was recently submitted. In the request, we asked to add STA 570, Basic Statistical Analysis, as an accepted course for the Ag Biotech statistics requirement.

For quite some time (6-8 years, perhaps), STA 570 has been recommended as an alternative to STA 291 for the stats requirement, but it was never made an "official" course option. I was unaware of this until Susan Skees brought it to my attention. Indeed, when you look in the UK Bulletin, only STA 291 is listed for the statistics requirement. When an ABT student takes STA 570, Susan has to record a waiver for STA 291. To make STA 570 an "official" accepted course for ABT and avoid the need for a waiver, the course was included in our request for the ABT program change.

At our meeting in September, STA 580 was discussed and approved as a statistics option, and this is recorded in the meeting minutes. However, STA 570 was not discussed at our meeting since I assumed at the time that it was already listed as an accepted option. This omission was noted when the program change request was sent out for consideration by the Ag faculty.

While it is unlikely to be a deal breaker, I'd like to confirm that including STA 570 in our request has the approval of the ABT coordinating committee. As soon as possible, please reply with a yes or no vote to add STA 570 as an option for the ABT statistics requirement. Certainly, this issue can be discussed further if necessary.

Thanks very much,
Dan

Daniel K. Howe, Ph.D.
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Ag Biotechnology Coordinating Committee Chair
M.H. Gluck Equine Research Center
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FAX: (859)257-8542
<http://www.uky.edu/Ag/Biotechnology/>

From: Perry, Sharyn
Sent: Thursday, February 04, 2010 11:44 AM
To: Howe, Daniel K
Subject: RE: STA 570

Yes

From: Goodin, Michael M
Sent: Thursday, February 04, 2010 12:39 PM
To: Howe, Daniel K
Subject: Re: STA 570

Yes - include

Regards

Michael Goodin, Ph.D. Tel:859-257-7445 x 80725
Associate Professor Fax:859-323-1961
Department of Plant Pathology
201F Plant Science Building
University of Kentucky
Lexington, KY 40546

From: Creamer, Trevor P
Sent: Thursday, February 04, 2010 1:17 PM
To: Howe, Daniel K
Subject: Re: STA 570

I vote yes.
Cheers,
Trevor

From: Matthews, James C
Sent: Thursday, February 04, 2010 2:18 PM
To: Howe, Daniel K
Subject: RE: STA 570

Hi Dan,

Yes, I vote "yes" to add STA 570 as an option for the ABT statistics requirement.

Thanks,

Jamie

From: Yuan, Ling
Sent: Thursday, February 04, 2010 5:34 PM
To: Howe, Daniel K
Subject: RE: STA 570

Yes.
Ling

From: Vander Kooi, Craig W
Sent: Friday, February 05, 2010 8:55 AM
To: Howe, Daniel K
Subject: Re: STA 570

Dan,

Sounds good.

Craig

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