

Cover Sheet for Assessment Plans

Directions: Please complete a separate cover sheet for each degree program (e.g., Associates – Doctorate). Feel free to make copies of this sheet if needed. Those graduate programs with an integrated master's and doctoral program may submit one cover sheet. The department head and respective dean are to sign before the plans are submitted to the Provost.

Department / Unit: Dept. of Anatomy and Physiology

Title and Level of Academic Program (e.g., Chemistry, Ph.D.): Anatomy and Physiology, Ph.D.

When submitting an Assessment Plan, please check and indicate when the faculty endorsed the plan.



Faculty have met, reviewed, and endorsed the Assessment Plans being submitted for this degree program.

Date of Endorsement:

12/04



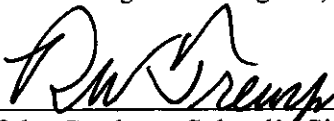
Department Head's Signature

Date

4/19/05

College Dean's Signature
(Required for Undergraduate Programs)

Date



Dean of the Graduate School's Signature
(Required for Graduate Degree Programs)

Date

6/24/05

November 1, 2004: Assessment plans are to be sent to the respective Dean
November 29, 2004: Relevant materials are to be sent from the Deans to the Provost

**Template
Degree Program
Assessment of Student Learning Plan
Kansas State University**

Check the box if your program's student learning outcomes have been modified since November 2003. If so, please email (apr@ksu.edu) or attach a hard copy to this document.

A. College, Department, and Date

College: Veterinary Medicine
Department: *Anatomy and Physiology*
Date: *April 19, 2005*

B. Contact Person(s) for the Assessment Plans

Chris Ross

C. Degree Program

Ph.D. in Anatomy and Physiology

D. Assessment of Student Learning Three-Year Plan

1. Student Learning Outcome(s)

The two student learning outcomes to be initially assessed are 1) Learning, and 2) Skills

Special rationale for selecting these learning outcomes (optional):

None

Relationship to K-State Student Learning Outcomes (insert the program SLOs and check all that apply):

Program SLOs	Knowledge	Skills	Attitudes and Professional Conduct	Program SLO is conceptually different from university SLOs
1. Knowledge	x	x	x	
2. Skills	x	x		

2. How will the learning outcomes be assessed? What groups will be included in the assessment?

SLO#1: Knowledge-The degrees granted by this program are doctoral-level graduate research degrees. Students are expected to gather, assimilate, and synthesize a knowledge base that will allow them to perform as independent scientists upon graduation. Using the assessment instruments attached, Graduate Advisors and advisory committee members will directly evaluate the developing knowledge base of each student as they progress through the training program.

SLO#2: Skills-All students are expected to develop laboratory skills appropriate to perform meaningful research in their discipline. They should also be capable of readily extending their skills as need be. Graduate Advisors and advisory committee members will directly evaluate the developing skill level of each student as they progress through the training program.

All graduate students currently enrolled in the program will be assessed. Graduate advisors (Major Professors) will complete Annual Report surveys, Preliminary Exam surveys, and Final Examination surveys. Graduate advisory committee members will complete Preliminary Exam surveys and Final Examination surveys as these steps occur. The Graduate Program Executive Committee will compile and evaluate survey results, and the Graduate Program faculty as a whole will participate in data evaluation and implementation of corrective actions.

3. When will these outcomes be assessed? When and in what format will the results of the assessment be discussed?

Annual Report surveys will be completed every year during January. Preliminary Exam and Final Examination surveys will be completed as they occur. Results will be compiled by the Graduate Program's Executive Committee and staff. The Graduate Program's faculty will be convened before the end of the Spring semester to discuss compiled data, and to discuss the progress of any individual student that is not making satisfactory progress (whose survey scores are not trending positively). The assessment process will begin with Annual Reports for the year 2005.

4. What is the unit's process for using assessment results to improve student learning?

The primary use of this data will be to assess the effectiveness of the Graduate Program's training procedures. If widespread negative trends are noted, cause(s) will be identified and corrected. Since our graduate faculty group is not large, this can be accomplished through the activity of the Graduate Executive Committee, and by the activity of the program graduate faculty as whole.

ANNUAL PROGRESS REPORT FOR Ph.D. DEGREE PROGRAM

MAJOR PROFESSOR

GRADUATE STUDENT

Name: _____

Name: _____

Signature: _____

Signature: _____

Date: _____

Date: _____

Degree sought: (Circle one) M.S. Ph.D.

- Has the students' supervisory committee been formed and approved by the graduate school?

Yes/No

- Has a program of study been submitted to the graduate school? Yes/No
- Please list all courses taken since the start of the last summer session including the grades attained in each. Grade slips if available may be attached to this form.

- What is the student's current GPA?
- Three seminar credits are required for the Ph.D. program and two seminar credits are required for the M.S. program. How many seminar credits have been completed at this time? _____
- How many hours of research have been taken since the start of the last summer session? _____
- Please give the total number of course work hours _____ and research hours _____ completed at this time.
- When does the student plan to finish the degree? _____
- Please list any full-length publications or abstracts from the past year for which the student was an author.

- Please list any awards won by the student during the past year.

- Please list any training (animal care and use, hazardous materials, etc.) that the student has finished this past year.

- Does the major professor feel that progress in the graduate program is satisfactory or unsatisfactory?
If unsatisfactory, please explain.

GRADUATE PROGRAM ASSESSMENT SURVEY
 Department of Anatomy and Physiology Doctoral Program
 Annual report survey

Major Professor _____ Student _____

Please check one box per line containing a bolded item.

		Completely proficient	Nearly proficient	Partially proficient	No skills	Not applicable	
1. KNOWLEDGE	<u><i>Core Biomedical Science Knowledge</i></u>						
	Presentation in Journal clubs						
	Participation in Journal clubs						
	Presentation in Departmental Seminars						
	<u><i>Laboratory Practice</i></u>						
	Knowledge of guidelines and institutional policies relevant to human subjects, animal experimentation, and laboratory safety including the use and disposal of radioactive and other hazardous materials.						
	Knowledge of operation and maintenance of basic lab instrumentation, including reliability and limitations						
	Knowledge of sound laboratory practice and ability to maintain records, logs, and protocols						
	<u><i>Lifelong Learning</i></u>						
	Awareness of various career opportunities						
	Awareness of contemporary issues in physiology						
	2. SKILLS	<u><i>Laboratory Practice(s)</i></u>					
		Skill in handling experimental animals					
		Skill in making measurements from living systems					
<u><i>Problem Solving/Reasoning</i></u>							
Ability to conceptualize problems							
Ability to brainstorm in a group							
Ability to integrate information from disparate sources							
Ability to break down and understand complex content							
Ability to solve problems by staying current with new technology							
Ability to troubleshoot							
Ability to identify irregular results							
Ability to evaluate hypotheses							

GRADUATE PROGRAM ASSESSMENT SURVEY
 Department of Anatomy and Physiology Doctoral Program
 Annual report survey

	and data critically					
	Ability to apply (as appropriate) both qualitative and quantitative approaches to research problems					
	Ability to match the experimental model/paradigm to the scientific question					
	Ability to interpret data validly					
	Ability to generate multiple solutions					
	Ability to research and defend independent conclusions					
	<u><i>Planning</i></u>					
	Ability to prioritize tasks					
	Ability to identify needed resources					
	<u><i>Experimental design</i></u>					
	Application of the scientific method to organize and test ideas/hypotheses					
	Ability to recognize meaningful problems for research					
	Ability to define problems precisely					
	Ability to select appropriate instrumentation for data acquisition					
	Skill in experimental design, including appropriate use and number of subjects/data points					
	Skill in data analysis					
	<u><i>Information technology</i></u>					
	Skill with computers, including basic software applications (word processing, spread sheet, graphical analysis, database management, Internet, email) and equipment set-up					
	Proficiency in Information storage and retrieval					
	<u><i>Data analysis</i></u>					
	Knowledge of and ability to select appropriate statistical approaches					
	Ability to determine accuracy of computed results					
	<u><i>Scientific literature</i></u>					
	Familiarity with research literature relevant to physiology and research focus					
	Ability to read the primary literature					

GRADUATE PROGRAM ASSESSMENT SURVEY
 Department of Anatomy and Physiology Doctoral Program
 Annual report survey

	Ability to keep abreast of major research developments relevant to both specific research area and to physiology in general					
	Ability to locate and assimilate new information rapidly					
	<i>Scientific presentations</i>					
	Ability to organize ideas and convey complex knowledge in an audience-appropriate fashion					
	Ability to use graphics to communicate ideas effectively					
	Ability to speak before small and large groups					
	Ability to assess audience response					
	Ability to field questions					
	Ability to speak effectively in English					
	<i>Technical writing</i>					
	Ability to organize ideas					
	Ability to write logical instructions					
	Ability to write a multiple levels (abstracts to full-length manuscripts)					
	Ability to edit and proofread					
	Ability to revise one's work in response to constructive criticism					
	Knowledge of processes related to publication in scientific journals					
	<i>Lifelong learning</i>					
	Skills associated with independent learning					
	Self-skills (self-motivation, self-confidence)					

GRADUATE PROGRAM ASSESSMENT SURVEY

Department of Anatomy and Physiology Doctoral Program Preliminary Examination survey

Evaluator _____ Major Professor Committee member

Student _____

Please check one box per line containing a bolded item.

		Completely proficient	Nearly proficient	Partially proficient	Not proficient	Not applicable	
1. KNOWLEDGE	<u>Core Biomedical Science Knowledge</u>						
	Presentation in Journal clubs						
	Participation in Journal clubs						
	Presentation in Departmental Seminars						
	<u>Laboratory Practice</u>						
	Knowledge of guidelines and institutional policies relevant to human subjects, animal experimentation, and laboratory safety including the use and disposal of radioactive and other hazardous materials.						
	Knowledge of operation and maintenance of basic lab instrumentation, including reliability and limitations						
	Knowledge of sound laboratory practice and ability to maintain records, logs, and protocols						
	<u>Lifelong Learning</u>						
	Awareness of various career opportunities						
	Awareness of contemporary issues in physiology						
	2. SKILLS	<u>Laboratory Practice(s)</u>					
		Skill in handling experimental animals					
Skill in making measurements from living systems							
<u>Problem Solving/Reasoning</u>							
Ability to conceptualize problems							
Ability to brainstorm in a group							
Ability to integrate information from disparate sources							
Ability to break down and understand complex content							
Ability to solve problems by staying current with new technology							
Ability to use troubleshooting skills							
Ability to identify irregular results							

GRADUATE PROGRAM ASSESSMENT SURVEY

Department of Anatomy and Physiology Doctoral Program Preliminary Examination survey

	Ability to evaluate hypotheses and data critically					
	Ability to apply (as appropriate) both qualitative and quantitative approaches to research problems					
	Ability to match the experimental model/paradigm to the scientific question					
	Ability to interpret data validly					
	Ability to generate multiple solutions					
	Ability to research and defend independent conclusions					
	<u><i>Planning</i></u>					
	Ability to prioritize tasks					
	Ability to identify needed resources					
	<u><i>Experimental design</i></u>					
	Application of the scientific method to organize and test ideas/hypotheses					
	Ability to recognize meaningful problems for research					
	Ability to define problems precisely					
	Ability to select appropriate instrumentation for data acquisition					
	Skill in experimental design, including appropriate use and number of subjects/data points					
	Skill in data analysis					
	<u><i>Information technology</i></u>					
	Skill with computers, including basic software applications (word processing, spread sheet, graphical analysis, database management, Internet, email) and equipment set-up					
	Proficiency in information storage and retrieval					
	<u><i>Data analysis</i></u>					
	Knowledge of and ability to select appropriate statistical approaches					
	Ability to determine accuracy of computed results					
	<u><i>Scientific literature</i></u>					
	Familiarity with research literature relevant to physiology and research focus					
	Ability to read the primary					

GRADUATE PROGRAM ASSESSMENT SURVEY

Department of Anatomy and Physiology Doctoral Program Preliminary Examination survey

	Literature					
	Ability to keep abreast of major research developments relevant to both specific research area and to physiology in general					
	Ability to locate and assimilate new information rapidly					
	<u>Scientific presentations</u>					
	Ability to organize ideas and convey complex knowledge in an audience-appropriate fashion					
	Ability to use graphics to communicate ideas effectively					
	Ability to speak before small and large groups					
	Ability to assess audience response					
	Ability to field questions					
	Ability to speak effectively in English					
	<u>Technical writing</u>					
	Ability to organize ideas					
	Ability to write logical instructions					
	Ability to write a multiple levels (abstracts to full-length manuscripts)					
	Ability to edit and proofread					
	Ability to revise one's work in response to constructive criticism					
	Knowledge of processes related to publication in scientific journals					
	<u>Lifelong learning</u>					
	Skills associated with independent learning					
	Self-skills (self-motivation, self-confidence)					

GRADUATE PROGRAM ASSESSMENT SURVEY

Department of Anatomy and Physiology Doctoral Program Final Examination survey

Evaluator _____ Major Professor Committee member

Student _____

Please check one box per line containing a bolded item.

		Completely proficient	Nearly proficient	Partially proficient	Not proficient	Not applicable	
1. KNOWLEDGE	<u><i>Core Biomedical Science Knowledge</i></u>						
	Presentation in journal clubs						
	Participation in journal clubs						
	Presentation in Departmental Seminars						
	<u><i>Laboratory Practice</i></u>						
	Knowledge of guidelines and institutional policies relevant to human subjects, animal experimentation, and laboratory safety including the use and disposal of radioactive and other hazardous materials.						
	Knowledge of operation and maintenance of basic lab instrumentation, including reliability and limitations						
	Knowledge of sound laboratory practice and ability to maintain records, logs, and protocols						
	<u><i>Lifelong Learning</i></u>						
	Awareness of various career opportunities						
	Awareness of contemporary issues in physiology						
	2. SKILLS	<u><i>Laboratory Practice(s)</i></u>					
		Skill in handling experimental animals					
Skill in making measurements from living systems							
<u><i>Problem Solving/Reasoning</i></u>							
Ability to conceptualize problems							
Ability to brainstorm in a group							
Ability to integrate information from disparate sources							
Ability to break down and understand complex content							
Ability to solve problems by staying current with new technology							
Ability to use troubleshooting skills							
Ability to identify irregular results							

GRADUATE PROGRAM ASSESSMENT SURVEY

Department of Anatomy and Physiology Doctoral Program Final Examination survey

	Ability to evaluate hypotheses and data critically					
	Ability to apply (as appropriate) both qualitative and quantitative approaches to research problems					
	Ability to match the experimental model/paradigm to the scientific question					
	Ability to interpret data validly					
	Ability to generate multiple solutions					
	Ability to research and defend independent conclusions					
	<i>Planning</i>					
	Ability to prioritize tasks					
	Ability to identify needed resources					
	<i>Experimental design</i>					
	Application of the scientific method to organize and test ideas/hypotheses					
	Ability to recognize meaningful problems for research					
	Ability to define problems precisely					
	Ability to select appropriate instrumentation for data acquisition					
	Skill in experimental design, including appropriate use and number of subjects/data points					
	Skill in data analysis					
	<i>Information technology</i>					
	Skill with computers, including basic software applications (word processing, spread sheet, graphical analysis, database management, Internet, email) and equipment set-up					
	Proficiency in information storage and retrieval					
	<i>Data analysis</i>					
	Knowledge of and ability to select appropriate statistical approaches					
	Ability to determine accuracy of computed results					
	<i>Scientific literature</i>					
	Familiarity with research literature relevant to physiology and research focus					
	Ability to read the primary					

GRADUATE PROGRAM ASSESSMENT SURVEY

Department of Anatomy and Physiology Doctoral Program Final Examination survey

	literature					
	Ability to keep abreast of major research developments relevant to both specific research area and to physiology in general					
	Ability to locate and assimilate new information rapidly					
	<u>Scientific presentations</u>					
	Ability to organize ideas and convey complex knowledge in an audience-appropriate fashion					
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	Ability to edit and proofread					
	Ability to revise one's work in response to constructive criticism					
	Knowledge of processes related to publication in scientific journals					
	<u>Lifelong learning</u>					
	Skills associated with independent learning					
	Self-skills (self-motivation, self-confidence)					

Department: Anatomy and Physiology
Degree Program Title: PhD

Evaluative Rubric for Degree Program Assessment Plans

Action Decided by the College Assessment Review Committee (CARC):

Date of Decision: June, 2005

Decision (check one):

- Revision Needed (*see first feedback section below*)
 Assessment Plan Approved

Feedback on immediate actions that are needed before approval:

Recommendations and feedback for the future (e.g., reporting assessment activities and results):

Department: Anatomy and Physiology
 Degree Program Title: PhD in Anatomy & Physi

Evaluative Rubric for Degree Program Assessment Plans

Assessment Plan Elements	Very Good 4	Acceptable 3	Developing 2	Undeveloped 1	Score For Each Element
<i>Student learning outcomes</i>	At least two SLO's are clearly stated using the proper format.	At least two SLO's are stated but with some lack of clarity.	SLO's are stated but unclear regarding one or more critical aspects.	SLO's are not stated in an acceptable format.	4
<i>Assessment method for each outcome</i>	Multiple assessment measures are identified for each outcome.	At least one assessment measure is identified for each outcome.	Assessment measures are identified for some outcomes.	Assessment methods are not identified or inadequately described.	4
<i>One-half or more of the methods are direct measures</i>	At least one-half of assessment measures are direct.			Fewer than one-half of the measures are direct measures.	4
<i>Groups to be included</i>	Groups are clearly identified.			Groups are not identified.	4
<i>Timeline for assessment implementation for next three years</i>	There is a clear plan for assessment implementation over each of the next three years.	The plan is somewhat clear but has some areas that are incomplete.	Some parameters have been established but a clear timeline is not evident.	There is not a stated implementation plan.	3
<i>Process for data presentation and discussion</i>	The process for the interpretation, presentation, and discussion of the data is clearly described, including who will be involved and timing.	The process is addressed but is unclear or incomplete in some aspects.	Some aspects of the process are described.	There is no stated plan.	4
<i>Process for implementing revisions based on assessment results</i>	The process for implementing revisions based on assessment results is clearly described.	The process is addressed but is unclear or incomplete in some aspects.	Some aspects of the process are described.	There is no stated plan.	4

Department: Anat. Physiol.
Degree Program Title: Ph.D.

Evaluative Rubric for Degree Program Assessment Plans

Action Decided by the College Assessment Review Committee (CARC):

Date of Decision: _____

Decision (check one):

- Revision Needed (*see first feedback section below*)
 Assessment Plan Approved

Feedback on immediate actions that are needed before approval:

2nd Eval

Timeline, process, and
implementation are
now laid out. ✓

Recommendations and feedback for the future (e.g., reporting assessment activities and results):