



# INDIANA UNIVERSITY

DEPARTMENT OF ANATOMY AND CELL BIOLOGY  
School of Medicine

March 18, 2015

Randy R. Brutkiewicz, Ph.D.  
Associate Dean for Graduate Studies

Dear Dr. Brutkiewicz,

I am writing this memo to formally request a small change to the curriculum of the Education Track PhD Program in Anatomy and Cell Biology. Currently, our students are required to take PHYSL F613 Medical Physiology. We propose to give students the option of taking either F613 Medical Physiology or F503 Graduate Physiology (see attached). Both courses are 5 credit hours and cover comparable material. We already give several options in our curriculum for alternative education and statistics courses that are deemed comparable. The rationale for this change is two-fold:

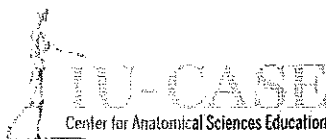
- To be proactive in anticipation of the new medical curriculum when it is implemented. If it conforms to the medical curriculum that has been under discussion, there will no longer be a free-standing medical physiology course for our students to take.
- To provide the students with greater flexibility in scheduling their coursework (the graduate course is taught in the Fall and the medical course is taught in the Spring).

This change has been unanimously approved by the Curriculum and Admissions Committee of the Education Track PhD Program and by the department's Graduate Studies Committee. Please let me know if you require further information. Thank you.

Sincerely,

James J. Brokaw, PhD, MPH  
Associate Professor of Anatomy and Cell Biology  
Director, Education Track PhD Program

cc: Joe Bidwell, PhD  
Kathy Jones, PhD



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Indiana University - Purdue University Indianapolis

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**Curriculum for Education Track PhD in Anatomy and Cell Biology  
Indianapolis Version  
Revised 3-13-15**

Biomedical Courses (36 hours)

- D850 Gross Anatomy (8)
  - D851 Histology (4)
  - D852 Neuroscience and Clinical Neurology (5)
  - G804 Cellular and Molecular Biology (3)
  - F613 Medical Physiology (5)
- OR**
- F503 Graduate Physiology (5)
  - D861 Anatomy Education Seminar (1); required yearly, which would sum to 5 credit hours assuming a 5-year degree completion time; this seminar series will focus on educational topics rather than bench research.
  - D878 Anatomy Teaching Practicum (2); supervised teaching in Gross Anatomy, Histology, and Neuroscience (repeated for 6 hours total); this teaching will entail lecturing as well as assisting in laboratory instruction.

Education Courses—Doctoral Minor (18 hours)

- M620 Pedagogical Methods in the Health Sciences (3)
- OR**
- W672 College Teaching in Health Sciences (3)
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- J500 Instruction in the Context of Curriculum (3)
- OR**
- C750 Curriculum in Higher Education (3)
- 
- P540 Learning and Cognition in Education (3)
- 
- Y611 Qualitative Inquiry in Education (3)
- 
- Y521 Methodological Approaches to Educational Inquiry (3) (PREFERRED)
- OR**
- Y520 Strategies for Educational Inquiry (3)

*In special circumstances, either of the courses below may substitute for Y521 or Y520 with permission of the student's advisory committee:*

- Y510 Action Research (3)
  - C750 Scholarship of Teaching and Learning (3)
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- And select **ONE** of these:
    - Y525 Survey Research (3)
- OR**
- Y603 Statistical Design of Educational Research (3)

**OR**

- C750 Topical Seminar (3)
- **OR**
- Another education course if approved by student's advisory committee

Statistics Courses (6-7 hours)

- Y502 Intermediate Statistics Applied to Education (3); requires concurrent registration with Y500 Computer Lab for Educational Statistics (1) (prerequisite: Y520 Strategies for Educational Inquiry or a course in basic statistics)
- **OR**  
P551 Biostatistics for Public Health I (3)
- Y604 Multivariate Analysis in Educational Research (3)
- **OR**  
P652 Biostatistics for Public Health II (3)

Free Electives (9 hours)

- To be selected in consultation with the advisory committee. Examples of suitable electives include:
  - ANAT D853 Human Developmental Anatomy (3)
  - G655 Research Communications Seminar (1)
  - STAT 53300 Nonparametric Statistics (3)
  - PSY 60800 Measurement Theory and Interpretation of Data (3)
  - TECH 58100 Mixed Methods Research (4)
  - EDUC Y612 Critical Qualitative Inquiry (3)
  - EDUC C795 Dissertation Proposal Preparation (3)
  - Other courses in biomedical sciences, education, or statistics

Research (20-21 hours)

- D700 Educational Research Practicum (2); a structured and supervised experience with faculty research mentors (may be repeated for up to 6 hours total)
- D860 Dissertation Research (cr. arr.)—sufficient to complete the 90 credit hour degree requirement

## Suggested Course Sequence for the Education Track at Indianapolis

	Fall	Spring	Summer
<b>Year 1</b>	Gross Anatomy (8) Cellular & Molecular Biology (3) Methodological Approaches to Educational Inquiry (3)	Histology (4) Pedagogical Methods in the Health Sciences (3) Free Elective (3) Seminar (1)	Instruction in Context of Curriculum (3)
<b>Year 2</b>	Neuroscience and Clinical Neurology (5) Qualitative Inquiry in Education (3) Intermediate Statistics Applied to Education w/lab (4) Anatomy Teaching Practicum (2)	Medical Physiology (5) Education Selective (3) Free Elective (3) Anatomy Teaching Practicum (2) Seminar (1)	Learning and Cognition in Education (3) Research
<b>Year 3</b>	Multivariate Analysis in Educational Research (3) Free Elective (3) Anatomy Teaching Practicum (2) Research	Seminar (1) Research	Qualifying Exam Research
<b>Year 4</b>	Research	Seminar (1) Research	Research
<b>Year 5</b>	Research/Dissertation	Seminar (1) Research/Dissertation	Oral Defense

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