Course Change Request

Indiana University

IUPUI Campus

Check Appropriate Boxes: Undergraduate credit [ ] Graduate credit [ ] Professional credit [ ]

1. School/Division Medicine / Graduate

2. Academic Subject Code Grad-840

3. Current Course Number F716

4. Current Credit Hours 1

5. Current Title Epithelial Cell Biology

6. Effective Semester/Year for changes listed below: Summer 2010

7. Instructor: Kempson

Type of Change Requested (Check appropriate boxes and indicate changes)

☑ 8. Change course number to: GL 40 (must be cleared with University Enrollment Services)

☐ 9. Current course title:

Change to:

Recommended abbreviation (optional) (Limited to 32 Characters including spaces)

☐ 10. Current credit hours fixed at: or variable from: to

Change to credit hours fixed at: or variable from: to

☐ 11. Current lecture contact hours fixed at: or variable from: to

Change to lecture contact hours fixed at: or variable from: to

☐ 12. Current non-lecture contact hours fixed at: or variable from: to

Change to non-lecture contact hours fixed at: or variable from: to

☐ 13. Is this course currently graded with S-F (only) grades? Yes ____ No ____

Change to S-F (only) grading? Yes ____ No ____

☐ 14. Does this course presently have variable title approval? Yes ____ No ____

Is variable title approval being requested? Yes ____ No ____

☐ 15. Is this course being discontinued? For all campuses _____ or for this campus only _____

☐ 16. Current course description

Change course description to (not to exceed 50 words)

17. Justification for change Consistency with available PhD minors; increase availability to other grad programs

(Use additional paper if necessary)

☐ 18. Are the necessary reading materials currently available in the appropriate library? Yes _____

19. A copy of every new course proposal must be submitted to departments, schools, or divisions in which there may be overlap of this course with existing courses or areas of strong concern, with instructions that they send comments directly to the originating Curriculum Committee. Please append a list of departments, schools, or divisions thus consulted.

Submitted by: Gally

Date 3/5/2010

Department Chairman/Division Director

Approved by: James Mode

Date 3/9/10

Dean

Date

Chancellor/Vice-President

Date

University Enrollment Services

After School/Division approval, forward the last copy (without attachments) to University Enrollment Services for initial processing, and the remaining four copies and attachments to the Campus Chancellor or Vice-President.

UPS 725 University Enrollment Services Final—White; Chancellor/Vice-President—Blue; School/Division—Yellow; Department/Division—Pink; University Enrollment Services Advance—White.
SYLLABUS: F716 (current course number)

1. Proposed course number and title
   G Epithelial cell Biology (1 cr)
   Instructor: Stephen Kempson
   Prerequisite: Graduate level cell biology course

2. Course description and rationale
   The course is an integrated approach to studying the structure and
   functional relationships in epithelial cells, the role of this subcellular organization
   in normal physiology, and the disturbances that underlie pathophysiology. The
   emphasis is on reading and discussion of original review articles and research
   papers, and demonstrations of techniques to study epithelial functions in cultured
   cells, tissues and model organisms such as the zebrafish.

3. Educational objectives
   a) Obtain an in-depth knowledge of epithelial organization and transport
      functions through discussions and reviews of current published works.
   b) To acquire data relating changes in morphological and macromolecular
      organization of epithelial cells under pathophysiological conditions and to learn
      how to interpret this data.

4. Course content
   Week 1: Transepithelial transport pathways: what they are and how they
   are regulated.
   Week 2: Epithelial cell architecture: assembly of junctional complexes and
   regulation by intracellular signals, use of the zebrafish model to study cell
   adhesion during development.
   Week 3: Cell polarity: the polarized cell model and its use to understand
   protein trafficking and retention in apical versus basolateral plasma membranes.
   Week 4: Disruption of polarized cell functions in renal ischemia and
   polycystic kidney disease.

5. Required texts
   All reading materials will be supplied by the instructor.
6. Evaluation and grading

Grades will be assigned based on (i) participation in discussions (50%) (ii) presentation of research papers (25%) (iii) completion of study questions based on problem solving (25%).

Grading scale will be: A (94-100%), A- (90-93%), B+ (87-89%), B- (84-86%), B- (80-83%), C+ (77-79%), C (74-76%), C- (70-73%), D (60-69%), F (below 60%)

7. Sample bibliography

Organization of vesicular trafficking in epithelia

Actin cytoskeleton in ischemic acute renal failure.

A physiological view of the primary cillum.

Phosphoinositide lipid second messengers: new paradigms for transepithelial signal transduction.

PDZ proteins retain and regulate membrane transporters in polarized epithelial cell membranes.

Biomechanical approaches for studying integration of tissue structure and function in mammary epithelia.

Kidney development and disease in the zebrafish.

E-cadherin-mediated adhesion is not the founding event of epithelial cell polarity in Drosophila.

Intravital multiphoton microscopy of dynamic renal processes.
8. Academic Misconduct.

Students will be instructed to make themselves aware of the School of Medicine and Graduate School regulations concerning plagiarism, the maintenance of academic honesty and the varieties of unacceptable behavior and cheating. Academic misconduct of any sort will not be tolerated in any way and will be dealt with as outlined in the IUPUI Student Code of Conduct, which can be viewed at http://life.iupui.edu/dos/code.htm.

Examples of misconduct include but are not limited to:

1. Cheating
   A student must not use or attempt to use unauthorized assistance, materials, information, or study aids in any academic exercise

2. Fabrication
   A student must not falsify or invent any information or data in an academic exercise including, but not limited to, records or reports, laboratory results, and citations to the sources of information.

3. Plagiarism
   A student must not adopt or reproduce ideas, words, or statements of another person without appropriate acknowledgment. A student must give credit to the originality of others and acknowledge an indebtedness whenever he or she does any of the following:
   a. Quotes another person's actual words, either oral or written
   b. Paraphrases another person's words, either oral or written
   c. Uses another person's idea, opinion, or theory; or
   d. Borrows facts, statistics, or other illustrative material, unless the information is common knowledge.

4. Interference
   a. A student must not steal, change, destroy, or impede another student's work.
   b. A student must not give or offer a bribe, promise favors, or make threats with the intention of affecting a grade or the evaluation of academic performance.

Potential consequences for academic misconduct:

If the instructor has information that one of his/her students committed an act of academic misconduct, the faculty member will hold an informal conference with the student. The conference will be prompt and private. If the faculty member concludes that the student is responsible for the misconduct, then the faculty member will impose an appropriate academic sanction (i.e., lower or failing grade on the assignment, assessing a lower or failing grade for the course).

IX. Americans with disabilities act:
Accommodations will be made for qualified students with disabilities registered with Adaptive Educational Services. Please contact them at 317-274-3241.