Fiscal Unit/Academic Org: Pathology - D2550  
Administering College/Academic Group: The College of Medicine  
Co-administering College/Academic Group:  
Semester Conversion Designation: Converted with minimal changes to program goals and/or curricular requirements (e.g., sub-plan/specialization name changes, changes in electives and/or prerequisites, minimal changes in overall structure of program; minimal or no changes in program goals or content)  
Current Program/Plan Name: Pathology  
Proposed Program/Plan Name: Pathology  
Program/Plan Code Abbreviation: PATHOL-MS  
Current Degree Title: Master of Science

Credit Hour Explanation

<table>
<thead>
<tr>
<th>Program credit hour requirements</th>
<th>A) Number of credit hours in current program (Quarter credit hours)</th>
<th>B) Calculated result for 2/3rds of credit hours</th>
<th>C) Number of credit hours required for proposed program (Semester credit hours)</th>
<th>D) Change in credit hours</th>
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<tbody>
<tr>
<td>Required credit hours offered by the unit</td>
<td>45</td>
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<td>30</td>
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<td>Minimum</td>
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<td>Maximum</td>
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<td>30.0</td>
<td>30</td>
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<td>Required credit hours offered outside of the unit</td>
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<tr>
<td>Maximum</td>
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<td>Required prerequisite credit hours not included above</td>
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<tr>
<td>Maximum</td>
<td>0</td>
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Program Learning Goals

Note: these are required for all undergraduate degree programs and majors now, and will be required for all graduate and professional degree programs in 2012. Nonetheless, all programs are encouraged to complete these now.

Program Learning Goals

* Students will acquire an understanding of fundamental mechanisms of pathogenesis and complete a mentored research project which addresses a timely, relevant problem in mechanisms of disease, culminating in a Masters thesis.

Assessment

Assessment plan includes student learning goals, how those goals are evaluated, and how the information collected is used to improve student learning. An assessment plan is required for undergraduate majors and degrees. Graduate and professional degree programs are encouraged to complete this now, but will not be required to do so until 2012.

Is this a degree program (undergraduate, graduate, or professional) or major proposal? Yes

Does the degree program or major have an assessment plan on file with the university Office of Academic Affairs? No

DIRECT MEASURES (means of assessment that measure performance directly, are authentic and minimize mitigating or intervening factors)

Standardized tests

* Local comprehensive or proficiency examinations

Classroom assignments

* Embedded testing (i.e. specific questions in homework or exams that allow faculty to assess students' attainments of a specific learning goal)
* Other classroom assessment methods (e.g., writing assignments, oral presentations, oral exams)

Evaluation of a body of work produced by the student

* Senior thesis or major project

Direct assessment methods specifically applicable to graduate programs

* Thesis/dissertation oral defense and/or other oral presentation
* Thesis/dissertation (written document)

INDIRECT MEASURES (means of assessment that are related to direct measures but are steps removed from those measures)

Surveys and Interviews

* Student evaluation of instruction

Additional types of indirect evidence

* Job or post-baccalaureate education placement
* Student or alumni honors/recognition achieved
* Curriculum or syllabus review
* Grade review

USE OF DATA (how the program uses or will use the evaluation data to make evidence-based improvements to the program periodically)

* Meet with students directly to discuss their performance
* Analyze and discuss trends with the unit's faculty
* Make improvements in curricular requirements (e.g., add, subtract courses)
* Make improvements in course content
* Make improvements in course delivery and learning activities within courses
* Make improvements in learning facilities, laboratories, and/or equipment
* Periodically confirm that current curriculum and courses are facilitating student attainment of program goals

Program Specializations/Sub-Plans

If you do not specify a program specialization/sub-plan it will be assumed you are submitting this program for all program specializations/sub-plans.

Pre-Major

Does this Program have a Pre-Major? No

Attachments

* Core curriculum-11-10.doc: Rationale & curriculum (List of Semester Courses, Owner: Waldman,W James)
* Q-S-Pathology-Appendix.pdf: Approval by Pathol GSC (Letter from Program-offering Unit, Owner: Waldman,W James)
* %COM Semester Conversion Letter 12 10 10.pdf (Letter from the College to CAA, Owner: Lucey,Catherine Reinis)

Comments
## Workflow Information

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<th>Date/Time</th>
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December 10, 2010

W. Randy Smith, PhD
Vice Provost, Curriculum & Institutional Relations
Office of Academic Affairs
203 Bricker Hall
190 North Oval Mall
CAMPUS

Dear Dr. Smith:

The College of Medicine submits for approval the following programs for semester conversion:

Baccalaureate Programs (School of Allied Medical Professions):
1) Athletic Training
2) Biomedical Sciences
3) Health Information and Management Systems
4) Health Sciences
5) Medical Dietetics
6) Medical Technology
7) Radiologic Sciences and Therapy with subprograms in Radiation Therapy, Radiography and Sonography
8) Respiratory Therapy

Minors:
1) Integrated Determinants of Health (School of Allied Medical Professions)
2) Anatomy (School of Biomedical Sciences, Dept. of Biomedical Informatics)

Masters Degree Programs:
1) Masters of Occupational Therapy (School of Allied Medical Professions)
2) MS in Health and Rehabilitation Sciences (School of Allied Medical Professions)
3) MS in Anatomy (School of Biomedical Sciences, Department of Biomedical Informatics)
4) MS in Medical Sciences (College of Medicine)
5) MS in Pathology (School of Biomedical Sciences, Dept of Pathology)
6) MS in Pharmacology (School of Biomedical Sciences, Dept. of Pharmacology)
Doctoral Degree Programs:
1) Doctor of Physical Therapy [DPT] (School of Allied Medical Professions)
2) Doctor of Medicine [MD] (College of Medicine)
3) PhD in Health and Rehabilitation Sciences (School of Allied Medical Professions)
4) PhD in Integrated Biomedical Sciences [IBGP] (School of Biomedical Sciences)
5) PhD in Anatomy (School of Biomedical Sciences, Dept. of Biomedical Informatics)

Each program proposal has been carefully developed with considerable curricular review and appropriate unit approval; letters delineating the process and approval accompany each template. At the College level, all proposals have been reviewed and approved through the College’s Curriculum Review process. Accordingly, each program has developed a transition plan that will allow students that maintain good academic standing to complete their respective program without delay due to the semester conversion. These transition plans are included with each program template. The course templates for all courses have also been submitted for approval. Please contact me or Deborah S. Larsen, our semester conversion coordinator, with any questions; specific questions regarding individual templates may be directed through Dr. Larsen to the appropriate contact person. Contact information is as follows:

Catherine R. Lacey, MD
Phone: 292-2600
e-mail: Catherine.lacey@osumc.edu

Deborah S. Larsen, PhD
Phone: 292-5645
e-mail: Deborah.larsen@osumc.edu

Thank you for the review of these materials.

Sincerely,

Catherine R. Lucey, MD
Interim Dean and Vice Dean of Education
College of Medicine
15 December, 2010

Dr. Catherine Lucey
Interim Dean
Associate Vice President for Health Sciences Education
OSU College of Medicine
254 Meiling Hall
370 W. 9th Avenue
CAMPUS

Dear Dr. Lucey,

This letter accompanies the plan for adaptation of the Master of Science Program in Pathology from quarters to the semester system. The transition of this program involves only modest changes. The overall goals and objectives of the program remain unchanged, those being to prepare individuals for mid-level entry into a biomedical research career and to provide an introductory graduate experience to those individuals who may decide to continue their studies toward the Doctorate.

The core curriculum will undergo only modest modification, reflecting the recent resurrection of two Pathology courses, one an introductory level graduate course on mechanisms of pathogenesis and the other on inflammation, which will now be included in the Program core curriculum. A major focus of the Program will remain the participation of students in hands-on laboratory research on a contemporary issue in mechanisms of disease culminating in a Master’s Thesis.

These modifications have been discussed and approved by the Pathology Graduate Studies Committee, for which I serve as Chair.

Respectfully,

W. James Waldman, Ph.D.
Associate Professor
Department of Pathology
Department of Molecular Virology, Immunology, and Medical Genetics
Chair, Pathology Graduate Studies Committee
MASTER OF SCIENCE DEGREE PROGRAM IN PATHOLOGY

Program rationale
The Master of Science Degree Program in Pathology is designed to prepare individuals for mid-level entry into a biomedical research career with a focus on mechanisms of disease. The program also provides an introductory level graduate experience as a stepping stone for students who choose to continue on to the Ph.D.

Core curriculum (required courses)

<table>
<thead>
<tr>
<th>Course #</th>
<th>Name</th>
<th>Credit hours</th>
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<tbody>
<tr>
<td>Pathology 6650</td>
<td>Mechanisms of Pathogenesis</td>
<td>3</td>
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<tr>
<td>Pathology 7847</td>
<td>Cell Mech and Pathogenesis of Inflammation</td>
<td>2</td>
</tr>
<tr>
<td>Pathology 6640</td>
<td>Fundamentals of Oncology</td>
<td>4</td>
</tr>
<tr>
<td>Molec Gen 6701</td>
<td>DNA Transactions and Gene Regulation</td>
<td>4</td>
</tr>
<tr>
<td>PUBHBIO 6280</td>
<td>Biostatistics</td>
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</tr>
<tr>
<td>Pathology 7999</td>
<td>Thesis Research in Pathology</td>
<td>variable</td>
</tr>
</tbody>
</table>

3 – 6 credit hours of elective courses in student’s area of research emphasis

Transition policy
Since all didactic courses will be completed within the student’s first year, the transition from quarters to semesters should present no problems.
Semester Conversion  
Transition Plan  
Master of Science, Pathobiology

The Master of Science Program in Pathobiology admits new students autumn quarter only. The current didactic core curriculum for the Program is designed to be completed in one academic year (see following page). During the second year of the program, students take one or two elective courses related to their area of research emphasis and direct most of their effort to thesis research. This schedule will not change following conversion to semesters. Hence students beginning the program Autumn, 2011 will complete the quarter-based core curriculum Summer quarter, 2012. While their subsequent elective courses will be in semester format, this will pose no problem. Likewise students’ thesis research will not be affected by the conversion to semesters.

Students are required to earn a grade of C or better for all core courses. Students earning less than a C in any course are permitted to continue through the Program curriculum but are required to repeat the course the following year. This situation, should it arise with a first year student during the 2011-12 academic year, will pose no problem for most of the Program courses. The contents of semester courses Pathology 6650, 7847, and 6640, as well as PUBHBIO 6280 will be essentially identical to their quarter-based predecessors (Pathology 650, 847, 640, and PUBHBIO 607). The only exception will be the semester course Molecular Genetics 6701, which will be a product of the merger of quarter courses Molec Gen 701 and Biochem 702. Hence a student who earns less that a C in either of these quarter courses during the 2011-12 academic year will be required to take Molec Gen 6701 the following year despite some expected redundancy in content.
Current quarter-based core curriculum

YEAR 1
Autumn quarter
  PATHOLOGY 650 - Mechanisms of Pathogenesis (5 credit hours)
  MOLECULAR GENETICS 701 – DNA Transactions (3 credit hours)
  PATHOLOGY 999 – Research in Pathology (4 credit hours)

Winter quarter
  BIOCHEMISTRY 702 – Regulation of Gene Expression (3 credit hours)
  PATHOLOGY/MVIMG 847 - Cell Mech and Pathogenesis of Inflammation (3 credit hours)
  PATHOLOGY/VBS 640 - Fundamentals of Oncology (4 credit hours)
  PATHOLOGY 999 – Research in Pathology (2 credit hours)

Spring quarter
  PATHOLOGY 999 – Research in Pathology (4 - 12 credit hours)
  Elective course(s)

Summer quarter
  PUBHBIO 607 - Biostatistics (6 credit hours)
  PATHOLOGY 999 – Research in Pathology (6 credit hours)

YEAR 2
  PATHOLOGY 999 – Research in Pathology (all quarters, 8 - 12 credit hours per quarter)
  Elective course(s)

Semester-based core curriculum

YEAR 1

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YEAR 2

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