UNIVERSITY OF KENTUCKY

**The Graduate School**
*351 Patterson Office Tower*
*Lexington, KY 40506-0027*
*(859) 257-4613*
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TRANSMITTAL

**DATE:** April 14, 2003

**TO:** Angel Clark
Senate Council

**FROM:** Lissa Holland
Graduate Council

The Graduate Council met on April 10, 2003, and approved the following:

COLLEGE OF MEDICINE

*Medical Sciences*

**Change in Master's Degree Program – Medical Sciences**
With the advent of the Integrated Biomedical Sciences (IBS) curriculum in Fall 2000, it is necessary to update the degree requirements for the Master of Science in Medical Sciences. Some required or recommended courses are not currently scheduled, having been superseded by the IBS courses. Other requirements are no longer appropriate, given that one audience for the MS in Medical Sciences are students who begin the IBS curriculum, but who transfer to a master's degree program. Accordingly, the requirements for the master's degree must be consistent with the requirements for the IBS curriculum, while still permitting sufficient flexibility for those who want to study one disciplinary area in greater depth. This changes the administrative structure of the M.S. degree to house the administration of the degree program in the IBS Office, rather than rotating among the participating departments.

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**Office of the Chancellor**
*Albert B. Chandler Medical Center*
*A301 Kentucky Clinic*
*Lexington, KY 40536-0284*
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February 28, 2003

Douglass S. Kalika, Ph.D., Chair
Graduate Council
359 Patterson Office Tower
CAMPUS 0027

Dear Dr. Kalika:

At its meeting on February 25, 2003, the Academic Council for the Medical Center approved, and recommends approval by the Graduate Council, for the proposal from the College of Medicine to revise the Medical Sciences Master's Program.

Thank you for your attention to this request.

Sincerely,

Phyllis P. Nash, Ed.D.
Associate Vice President for Academic and Student Affairs

PPN:co

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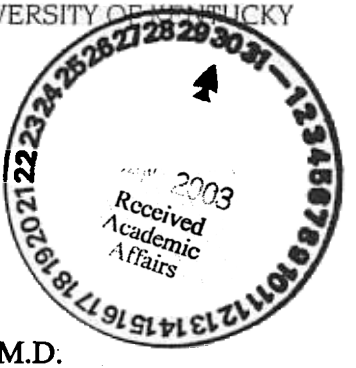
attachments

c: Emery A. Wilson, M.D.
C. Darrell Jennings, M.D.
Jacque Hager
Senate Council Office

MAR 1 0 2003

UNIVERSITY OF KENTUCKY




**Dean and Associate Vice President for Clinical Services**
**College of Medicine**
*MN 150 Chandler Medical Center*
*800 Rose Street*
*Lexington, KY 40536-0298*
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January 27, 2003

MEMORANDUM

James W. Holsinger, Jr., M.D.
Chair, Academic Council for the Medical Center

FROM: Emery A. Wilson, M.D.
Dean and Associate Vice President for Clinical Services

New Course Application(s) & Revision to M.S. in Medical Sciences Program

The Faculty Council of the College of Medicine has approved and submits for your consideration and approval the following new course application(s) & revision:

**FP 855 Hospice & Palliative Care: A Continuum of Caring**
Description: Designed for motivated 4th year medical students who want to understand more about Hospice and Palliative Care. This rotation will present students with a multidisciplinary approach to caring for patients by working with doctors, nurses, home health care providers and chaplains.
Justification: To provide students with experience with an understanding of the Hospice and Palliative Care models for providing excellent patient care.

**SUR 875 Maxillofacial Disease for the Health Care Professional**
Description: Multidisciplinary clinical experience including maxillofacial surgery, Orofacial Pain, and Oral Pathology. The course can be tailored to medical student interest with more or less emphasis placed on any aspect of Oral and Maxillofacial Surgery.
Justification: To broaden exposure of students to diseases of the maxillofacial complex and to provide them the opportunity to participate in treatment.

**Revision of M.S. in Medical Sciences**
Description: With the advent of the IBS Curriculum, it is necessary to revise the M.S. in Medical Sciences to bring the specified courses required as part of the core curriculum in line with the IBS requirements. It also changes the administrative structure of the M.S. degree to house the administration of the degree program in the IBS Office, rather than rotating among the participating departments.
Justification: Course requirements for the master of science in medical sciences need to be changed to be consistent with the IBS curriculum and current course offerings.

P019

# REQUEST FOR CHANGE IN MASTERS DEGREE PROGRAM

Program: Medical Sciences

Department/Division: 5 Basic Science Departments participating in IBS & MS in Medical Sciences

College: College of Medicine  Bulletin pp

Degree Title (Old): MS in Medical Sciences  Major (New): MS in Medical Sciences

CIP Code: 51.1399.02  HEGIS Code:

Accrediting Agency (if applicable):

## I. CHANGE(S) IN PROGRAM REQUIREMENTS

| | | Current | Proposed |
|---|---|---|---|
| 1. | Number of transfer credits allowed (Graduate School limit: 9 hours or 25% of coursework) | 9 hours or 25% of coursework | 9 hours or 25% of coursework |
| 2. | Residence requirement (if applicable) | N/A | N/A |
| | Language(s) and/or skill(s) required | N/A | N/A |
| 4. | Termination criteria | Per Graduate School | Per Graduate School |
| 5. | Plan A requirements* | 24 credit hours of coursework & thesis | 24 credit hours of coursework & thesis |
| 6. | Plan B requirements* | 30 credit hours of | 30 credit hours of |
| | Distribution of course levels required (At least one half must be at 600+ level & two thirds must be in organized courses) | Requirement as stated by Graduate School | Requirement as stated by Graduate School |
| 8. | Required courses (if applicable) | See Attached Chart | See Attached Chart |
| 9. | Required distribution of courses within program (if applicable) | | |
| 10. | Final examination requirements | Final examination as required by Graduate School | Final examination as required by Graduate School |

* If there is only one plan for the degree, plans involving a thesis (or the equivalent in studio work, etc.) should be discussed under Plan A and those not involving a thesis should be discussed under Plan B.

NOTE: To the extent that proposed changes in 5, 6 or 8 above involve the addition of courses in other programs, please submit correspondence from the other program(s) pertaining to the availability of such courses to your students.

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11. Any other requirements not covered above

## II. RATIONALE FOR CHANGE(S)

If the rationale involves accreditation requirements, please include specific references to those requirements.

Course requirements for the master of science in medical sciences need to be changed to be consistent with the IBS curriculum and current course offerings.

**Signatures of Approval:**

| | |
|---|---|
| Department Chair | Date 11.25.02 |
| Dean of the College | Date 1/23/03 |
| | Date of Notice to the Faculty 12/16/02 |
| Curriculum Committee ~~Undergraduate Council~~ | Date 1/27/03 |
| Faculty Council ~~*University Studies~~ | Date 4/14/03 |
| ~~*Graduate Council~~ | Date 2/24/03 |
| Academic Council for the Medical Center | Date |
| Senate Council | Date of Notice to University Senate |

*If applicable, as provided by the Rules of the University Senate

ACTION OTHER THAN APPROVAL

Rev 11/98

11/19/2002

# Master of Science in Medical Sciences Requirements (Revised Nov. 2002)

| Program | Plan A | Plan B |
|---|---|---|
| Degree Requirements | 24 credit hours of coursework (50% at 600 level or above; 2/3 in organized courses) & Thesis | 30 credit hours of coursework (50% at 600 level or above; 2/3 in organized courses) |
| **Medical Sciences Core Curriculum (based on IBS Curriculum)** | 10-11 credit hours required, 9 credit hours recommended | 10-11 credit hours required, 9 credit hours recommended |
| **Required: 10-11 credit hours** | | |
| **Biochemistry & Molecular Biology: 6 credit hours** | IBS 601/BHC 607 Biomolecules and Metabolism; IBS 602/BCH 608 Biomolecules and Molecular Biology | IBS 601/BHC 607 Biomolecules and Metabolism; IBS 602/BCH 608 Biomolecules and Molecular Biology |
| **Cellular Biology: 3 credit hours** | IBS 603 Cell Biology | IBS 603 Cell Biology |
| **Seminar: 0-1 credit hours** | IBS 609 (0 credit hours) or Seminar in department of specialization (1 credit hours) | IBS 609 (0 credit hours) or Seminar in department of specialization (1 credit hours) |
| **Ethics: 1 credit hour** | TOX 600 Ethics | TOX 600 Ethics |
| **Recommended: 9 credit hours** | | |
| **Cell Signaling: 3 credit hours** | IBS 604 Cell Signaling | IBS 604 Cell Signaling |
| **Genetics: 2 credit hours** | IBS 605 Experimental Genetics | IBS 605 Experimental Genetics |
| **Integrated Biomedical Sciences: 4 credit hours** | IBS 606 Integrated Biomedical Sciences | IBS 606 Integrated Biomedical Sciences |
| **Remaining credit hours** | Thesis (Note: credit hours in thesis research and/or independent study do not count toward 24 credit hours of coursework.) | No Thesis |
| | 13-14 credit hours in recommended IBS Curriculum and/or area of specialization | 19-20 credit hours in recommended IBS Curriculum and/or area of specialization |
| **Master's Plan** | Developed with major professor /advisor | Developed with major professor /advisor |
| **Advisory Committee** | 3 graduate faculty approved by DGS of student's area of specialization | 3 graduate faculty approved by DGS of student's area of specialization |

11/19/2002

# Medical Sciences Masters Requirements

| | Current | | Revised | |
|---|---|---|---|---|
| | Plan A | Plan B | Plan A | Plan B |
| Degree Program | Coursework & Thesis | For students with no intentions for further graduate work or professional study | Coursework & Thesis | Coursework Only |
| Coursework Credit Hours | 24 credit hours: 50% at 600+ level | 30 credit hours: 50% at 600+ level | 24 credit hours: 50% at 600+ level | 30 credit hours: 50% at 600+ level |
| Core Curriculum | 10 credit hours | 10 credit hours | 10-11 credit hours required, 9 credit hours recommended | 10-11 credit hours required, 9 credit hours recommended |
| Biochemistry | Required: 6 credit hours: BCH 607 & BCH 608 | Required: 6 credit hours: BCH 607 & BCH 608 | Required: 6 credit hours in Biochemistry & Molecular Biology: IBS 601/BCH607 & IBS 602/BCH608 | Required: 6 credit hours in Biochemistry & Molecular Biology: IBS 601/BCH607 & IBS 602/BCH608 |
| Molecular & Cellular Biology | 6-7 credit hours in Molecular & Cellular: Molecular: MI 615, 618, PHA 649, PGY 590, BCH 611; Cellular: BIO 632, PGY 602, ANA 516 | 6-7 credit hours in Molecular & Cellular: Molecular: MI 615, 618, PHA 649, PGY 590, BCH 611; Cellular: BIO 632, PGY 602, ANA 516 | Required: 3 credit hours in Cellular Biology: IBS 603 | Required: 3 credit hours in Cellular Biology: IBS 603 |
| Seminar | Required: 2 credit hours: ANA 600, PHA 770, PGY 774, MI 772, BCH 618 & 691 | Required: 2 credit hours: ANA 600, PHA 770, PGY 774, MI 772, BCH 618 & 691 | Required: IBS 609 (0 credit hours) or departmental seminar (1 credit hours) | Required: IBS 609 (0 credit hours) or departmental seminar (1 credit hours) |
| Ethics | Required: 2 credit hours: TOX 600 | Required: 2 credit hours: TOX 600 | Required: I credit hours: TOX 600 | Required: I credit hours: TOX 600 |
| Cell Signaling | | | Recommended: 3 credit hours in Cell Signaling: IBS 604 | Recommended: 3 credit hours in Cell Signaling: IBS 604 |
| Genetics | | | Recommended: 2 credit hours in Genetics: IBS 605 | Recommended: 2 credit hours in Genetics: IBS 605 |
| Integrated Biomedical Sciences | | | Recommended: 4 credit hours in integrated systems: IBS 606 | Recommended: 4 credit hours in integrated systems: IBS 606 |
| Remaining credit hours | Thesis | No Thesis | Thesis | No Thesis |
| | Remaining 7-8 credit hours in area of specialization | Remaining 13-14 credit hours in area of specialization | Remaining 13-14 credit hours in recommended IBS Curriculum and/or area of specialization | Remaining 19-20 credit hours in recommended IBS Curriculum and/or area of specialization |
| Master's Plan | Developed with major professor /advisor prior to 3rd semester | Developed with major professor /advisor prior to 3rd semester | Developed with major professor /advisor | Developed with major professor /advisor |
| Advisory Committee | 3 graduate faculty approved by DGS of student's disciplinary area | 3 graduate faculty approved by DGS of student's disciplinary area | 3 graduate faculty approved by DGS of student's disciplinary area | 3 graduate faculty approved by DGS of student's disciplinary area |

UNIVERSITY OF KENTUCKY

**Executive Dean**
**College of Medicine**
*MN150 Chandler Medical Center*
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*Email: dwatt@pop.uky.edu*
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November 20,2002

Curriculum Committee
College of Medicine

FROM: David Watt
Executive

Revision of M.S. in Medical Sciences

With the advent of the IBS Curriculum, it is necessary to revise the M.S. in Medical Sciences to bring the specified courses required as part of the core curriculum in line with the IBS requirements. It also changes the administrative structure of the M.S. degree to house the administration of the degree program in the IBS Office, rather than rotating among the participating departments.

Enclosure: proposal and attachments

Proposal approved by:

Don Gash, Chair
Anatomy & Neurobiology

Alan Kaplan, Chair
Microbiology, Immunology & Molecular Genetics

Louis Hersh, Chair
Molecular & Cellular Biochemistry

Philip Landfield, Chair
Molecular & Biomedical Pharmacology

Brian Jackson, Interim Chair
Physiology

# Proposed Revision

## Master of Science in Medical Sciences

Last revised November 20, 2002

**Need for revision:** With the advent of the Integrated Biomedical Sciences (IBS) curriculum in fall 2000, it is necessary to update the degree requirements for the Master of Science in Medical Sciences. Some required or recommended courses are not currently scheduled, having been superseded by the IBS courses. Other requirements are no longer appropriate, given that one audience for the MS in medical sciences are students who begin the IBS curriculum, but who transfer to a master's degree program. Accordingly, the requirements for the master's degree must be consistent with the requirements for the IBS curriculum, while still permitting sufficient flexibility for those who want to study one disciplinary area in greater depth.

**Curricular Revisions:** The curricular revisions for the MS in medical sciences are based on the IBS curriculum and are detailed on the attached spreadsheets. The minimum core curriculum is 10-11 credit hours. Courses in biochemistry, molecular biology and cell biology are required because they provide a broad foundation for understanding the biomedical sciences. In addition, the basic course in ethics and participation in a seminar sequence are required. Other IBS courses are recommended. This permits flexibility to accommodate students who want to complete a thesis or pursue more focused coursework in a particular area.

**Thesis Option:** We have retained the division of the degree program into Plan A Thesis Option and Plan B Coursework Only Option. It should be noted that the Plan A Thesis Option generally serves a limited and well-defined population. Often students in Plan A are either lab technicians who are already engaged in research or doctoral students who have completed part of their dissertation research before transferring to the masters' degree program. Students not in these two categories may be advised to pursue a Plan B master's degree due to the difficulty of identifying a laboratory for master's research.

**Administrative Changes:** In addition to changing course requirements, we want to centralize the administrative structure for this degree program to be consistent with the current administrative structure of the IBS curriculum. The IBS Graduate Committee administers the IBS curriculum and serves as the admissions committee for the Integrated Biomedical Sciences. This Committee will replace the current Steering Committee for the MS in medical sciences which is composed of the DGSs of the five participating departments. The IBS Graduate Committee includes these DGSs and an additional member from each department plus a member from the Department of Pathology. This is an appropriate body to handle administrative and admissions issues for both

graduate programs. Since there are very few master's candidates, there will not be a significant addition to the Committee's duties.

The DGSs of the five participating departments will serve as academic advisors to the master's candidates.

The director of the Integrated Biomedical Sciences will oversee the day-to-day administration of the master's program. In the event the IBS director is not also a DGS, a DGS from one of the five participating programs will be designated DGS of the MS in medical sciences.

All administrative duties will be handled by the IBS Office. These will include admissions inquiries, processing admissions materials and handling requirements for master's candidates that are not specifically the duties of the DGSs.

**Program Requirements:** Aside from the changes to the curriculum and administrative operations, there will be no changes to other program requirements.

***Plan A*** will require 24 credit hours of coursework (50% at the 600-level or above, 2/3 in organized courses) plus a satisfactory thesis. Credit hours in thesis research and/or independent study will not count toward the 24 credit hours of coursework required. ***Plan B*** will require 30 credit hours of coursework (50% at the 600-level or above, 2/3 in organized courses). For both plans, at least 50% of all coursework must be in the core area, i.e., courses offered by the five participating basic science departments.

An area of specialization will be selected from the five participating departments: Anatomy & Neurobiology; Microbiology, Immunology & Molecular Genetics; Molecular & Biomedical Pharmacology; Molecular & Cellular Biochemistry; and Physiology.

Students will be required to establish an Advisory Committee consistent with Graduate School guidelines prior to the third semester of enrollment in the master's program. The Advisory Committee will meet at least annually to evaluate all aspects of student progress toward the degree and may approve exceptions to course plan requirements based on prior coursework and educational background that are consistent with the rules of the Graduate School. The Committee will be responsible for administering a final oral examination in accordance with the rules of the Graduate School.

**Termination procedures**: Termination procedures will be maintained as those specified in the rules of the Graduate School. Reasons for termination include one or more of the following: failure of the final examination; scholastic probation for three continuous semesters; failure to make satisfactory progress toward completion of a satisfactory thesis as determined by the thesis advisor and the

Advisory Committee. In addition, misconduct of a serious nature during the master's program, e.g., cheating, plagiarism, scientific misconduct such as falsification of scientific data, misuse of data or misuse of equipment, are causes for dismissal from the program following procedures outlined in the UK Student Code. This is consistent with IBS guidelines.

**New Courses:** The revised master of science in medical sciences uses only existing courses. No new courses are proposed.