

Request for Graduate Addition, Deletion, or Change of Area of Emphasis-Page 1

1. Prepare one paper copy with all signatures and supporting material and forward to the Graduate Council Chair.
2. E-mail one PDF copy without signatures to the Graduate Council Chair. If attachments included, please merge into a single file.
3. **The Graduate Council cannot process this application until it has received both the PDF copy and the signed hard copy.**

College: MedicineDept/Division: Biomedical ResearchContact Person: Todd GreenPhone: x6-3531

Action Requested

Check action requested: Addition Deletion ChangeDegree Program M.S.Area of Emphasis Cell BiologyEffective Term/Year Fall 20 Spring 20 Summer 20 18

Notifications

Attach a copy of written notification regarding this curriculum request to the following:

1. Statement of Non-Duplication: If this area of emphasis will be similar in title or content to an existing area of emphasis, please send a memo to the affected department/division and include a copy with this packet as well as the response received from the affected department.
2. If your department/division requires additional faculty, equipment, or specialized materials, attach an estimate of cost and time required to secure these items.

Signatures: if disapproved at any level, do not sign. Return to previous signer with recommendation attached.

Dept. Chair/Division Head _____	Date _____
Registrar _____	Date _____
College Curriculum Chair _____	Date _____
College Dean _____	Date _____
Graduate Council Chair _____	Date _____
Provost/VP Academic Affairs _____	Date _____
President _____	Date _____

Request for Graduate Addition, Deletion, or Change of Area of Emphasis-Page 2

1. Please provide a rationale for addition, deletion, change:

The name of the graduate program was changed from Biomedical Sciences (BMS) to Biomedical Research (BMR). This meant the previous areas of emphasis were deleted, and thus new ones have to added. And this new area of emphasis better represents the research interests of the BMR faculty.

2. Please describe any changes in curriculum:

Course number, title, credit hours. Note whether each course is required or optional. Enter NONE if no change.

ATTACHED

3. **Additional Resource Requirements:** If your program requires additional faculty, equipment or specialized materials to ADD or CHANGE this Area of Emphasis attach an estimate of the time and money required to secure these items. May attach separate page if needed

NOTE: approval of this form does not imply approval for additional resources. Enter NOT APPLICABLE if not applicable.

NONE

4. **NON-DUPLICATION:**

If a question of possible duplication occurs, attach a copy of the correspondence sent to the appropriate department(s) describing the request and any response received from them.

Enter NONE if not applicable.

NONE

For catalog changes as a result of the above action, please fill in the following pages.

Request for Graduate Addition, Deletion, or Change of Area of Emphasis-Page 3

5. **Current Catalog Description**

Insert the *Current* Catalog Description and page number from the latest catalog for entries you would like to change.
(May attach separate page if needed)

ATTACHED

6. **Edits to the Current Description**

Attach a PDF copy of the current catalog description prepared in MS Word with strikethroughs to mark proposed deletions and use the highlight function to indicate proposed new text.

7. **New Catalog Description**

Insert a 'clean' copy of your proposed description, i.e., no strikethroughs or highlighting included. This should be what you are proposing for the new description. (May attach separate page if needed)

ATTACHED

Request for Graduate Addition, Deletion, or Change of Area of Emphasis-Page 4

Please insert in the text box below your Area of Emphasis change information for the Graduate Council agenda. Please enter the information exactly in this way (including headings):

Department:

Area of Emphasis Title:

Credit Hours:

Type of Change Requested: *(addition, deletion, change)*

Term to Take Effect: *(Fall, Spring, Summer/Year)*

Rationale:

Department: Biomedical Research

Area of Emphasis Title: Cell Biology, M.S.

Credit Hours: 36

Type of Change Requested: Addition

Term to Take Effect: Summer 2018

Rationale: The name of the graduate program was changed from Biomedical Sciences (BMS) to Biomedical Research (BMR). This meant the previous areas of emphasis were deleted, and thus new ones have to added. And this new area of emphasis better represents the research interests of the BMR faculty.

CELL BIOLOGY MS CURRICULUM

Required Courses

BMR 601	Introduction to Nucleic Acids and Proteins	3 CR
BMR 602	Introduction to Cell Structure and Metabolism	3 CR
BMR 603	Regulation of Cell Function	2 CR
BMR 604	Cellular Basis of Disease	1 CR
BMR 617	Statistical Techniques for the Biomedical Sciences	3 CR
BMR 644	Responsible Conduct of Research	1 CR
BMR 660	Communication Skills for Biomedical Sciences I	1 CR
BMR 661	Communication Skills for Biomedical Sciences II	1 CR
BMR 680	Seminar (minimum 4 credits required)	1 CR
BMR 785	Introduction to Research	3 CR
BMR 882	Research	Maximum 15 CR
BMS 681	Thesis	3-6 CR

Students are required to take 5 additional hours from the following

BMS 651	Cancer Biology	4 CR
BMS 652	Cancer Biology Colloquium	1 CR
BMS 665	CODRC Colloquium	1 CR
PHS 666	Physiology of the Cell	3 CR
PHS 667	Experimental Approaches to Physiology	4 CR

CURRENT CATALOG DESCRIPTION

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School of Medicine

Dr. Joseph Shapiro, Dean

<http://musom.marshall.edu>

BIOMEDICAL SCIENCES, M.S., Ph.D., M.D./Ph.D.

Areas of Emphasis

Cancer Biology

Cardiovascular Disease, Obesity, and Diabetes

Infectious and Immunological Diseases

Medical Sciences (M.S. only)

Neuroscience and Developmental Biology

Toxicology and Environmental Health Sciences

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BIOMEDICAL SCIENCES, M.S. (Cancer Biology; Cardiovascular Disease, Obesity, and Diabetes; Infectious and Immunological Diseases; Neuroscience and Developmental Biology; Toxicology and Environmental Health Sciences Areas of Emphasis)

BIOMEDICAL SCIENCES, M.S. (Medical Sciences Area of Emphasis)

CURRENT CATALOG DESCRIPTION WITH EDITS

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School of Medicine

Dr. Joseph Shapiro, Dean

<http://musom.marshall.edu>

~~BIOMEDICAL SCIENCES, M.S., Ph.D., M.D./Ph.D.~~

~~Areas of Emphasis~~

- ~~— **Cancer Biology**~~
- ~~— **Cardiovascular Disease, Obesity, and Diabetes**~~
- ~~— **Infectious and Immunological Diseases**~~
- ~~— **Medical Sciences (M.S. only)**~~
- ~~— **Neuroscience and Developmental Biology**~~
- ~~— **Toxicology and Environmental Health Sciences**~~

BIOMEDICAL RESEARCH, M.S., Ph.D., M.D./Ph.D.

Areas of Emphasis

- Cardiovascular Disease**
- Cell Biology**
- Medical Sciences (M.S. only)**
- Neurobiology and Addiction**
- Obesity and Related Diseases**
- Toxicology and Environmental Health**

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~~BIOMEDICAL SCIENCES, M.S. (Cancer Biology; Cardiovascular Disease, Obesity, and Diabetes; Infectious and Immunological Diseases; Neuroscience and Developmental Biology; Toxicology and Environmental Health Sciences Areas of Emphasis)~~

BIOMEDICAL RESEARCH, M.S. (Cardiovascular Disease; Cell Biology; Neurobiology and Addiction; Obesity and Related Diseases; Toxicology and Environmental Health)

BIOMEDICAL SCIENCES **RESEARCH, M.S. (Medical Sciences Area of Emphasis)**

NEW CATALOG DESCRIPTION

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School of Medicine

Dr. Joseph Shapiro, Dean

<http://musom.marshall.edu>

BIOMEDICAL RESEARCH, M.S., Ph.D., M.D./Ph.D.

Areas of Emphasis

Cardiovascular Disease

Cell Biology

Medical Sciences (M.S. only)

Neurobiology and Addiction

Obesity and Related Diseases

Toxicology and Environmental Health

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BIOMEDICAL RESEARCH, M.S. (Cardiovascular Disease; Cell Biology; Neurobiology and Addiction; Obesity and Related Diseases; Toxicology and Environmental Health)

BIOMEDICAL RESEARCH, M.S. (Medical Sciences Area of Emphasis)