

Brothers, Sheila C

From: Schroeder, Margaret <m.mohr@uky.edu>
Sent: Wednesday, January 28, 2015 11:42 AM
To: Brothers, Sheila C; Hippisley, Andrew R
Subject: ABT-MSMS University Scholars Program
Attachments: ABT-MSMS University Scholars_Final.pdf

Agriculture Biotechnology and Master of Science in Medical Sciences (ABT-MSMS) University Scholars Program

This is a recommendation that the University Senate approve the establishment of a new University Scholars Program in Agriculture Biotechnology and Master of Science Medical Sciences (ABT-MSMS) within the College of Agriculture, Food, and Environment, and the College of Medicine.

Please find the updated version of the proposal attached here.

Please let me know if you need anything else.

Best-
Margaret

Margaret J. Mohr-Schroeder, PhD | Associate Professor of Mathematics Education | [STEM PLUS Program Co-Chair](#)
| [Department of STEM Education](#) | [University of Kentucky](#) | [www.margaretmohrschroeder.com](#)





College of Medicine
Medical Sciences

Master's of Science in Medical Sciences Program
College of Medicine
University of Kentucky
138 Leader Avenue, Room 113
Lexington, KY 40506-9983
<http://graduate.med.uky.edu/ms-medical-sciences>

November 11, 2014

Curriculum Committee
College of Medicine
University of Kentucky

RECEIVED

DEC 22 2014

OFFICE OF THE SENATE COUNCIL *RW*

Re: Proposal to create a University Scholars Program

Dear Curriculum Committee Members,

On behalf of the Curriculum Committee of the College of Agriculture, Food, and Environment and the Master's of Science in Medical Sciences (MSMS) Program Advisory Committee, please see the attached proposal to create a University Scholars Program for students in the Agriculture Biotechnology (ABT) program. Dr. Robert Houtz, Chair of the Department of Horticulture and I generated this proposal to provide students in the ABT program the opportunity to seek a MSMS degree during the latter stages of their undergraduate career. It is envisioned that this combined degree program will be of benefit to the students, as well as the ABT and MSMS programs and their respective Colleges, and the University as a whole.

We look forward to hearing from you regarding this proposal and am happy to provide additional information or answer any questions.

Kind regards,

Joe E. Springer, Ph.D.
Professor
Director of Graduate Studies
M.S. in Medical Science
Neurorehabilitation Endowed Chair
Spinal Cord and Brain Injury Research Center
Physical Medicine and Rehabilitation
University of Kentucky



**Joint Proposal for a University Scholars Program
With the Master of Science in Medical Sciences for Agriculture Biotechnology Undergraduates**

Introduction

The overall objective of this proposal is to develop a University Scholars Program in which students in the undergraduate Agriculture Biotechnology (ABT) program are able to seek a Master of Science degree in the Medical Sciences (MSMS) program. At the present time, there is no direct undergraduate degree associated with the MSMS program.

The MSMS is a broad interdisciplinary degree program housed in the College of Medicine. Participating Departments and Centers include Anatomy and Neurobiology; Behavioral Sciences; Graduate Center for Nutritional Sciences; Graduate Center for Toxicology; Microbiology, Immunology and Molecular Genetics; Molecular and Biomedical Pharmacology; Molecular and Cellular Biochemistry; and Physiology. The MSMS may be used as a stand-alone degree by post-baccalaureate and graduate students seeking career enhancement in fields such as basic biomedical research, the pharmaceutical industry, or the health science professions; by students seeking academic credentials in the biomedical sciences prior to applying for medical school or other health related professional degree programs; or by students seeking to enhance their knowledge base prior to choosing a career direction. The current structure of the MSMS program allows for development of an individualized and flexible curriculum that enhances the academic credentials of our students.

The interdisciplinary undergraduate Agriculture Biotechnology program in the College of Agriculture, Food and Environment is one of most well-known and successful undergraduate programs at the University of Kentucky, both in terms of the quality of its students as well as their placement in professional and graduate schools. Many ABT students when near the completion of their BS degree enroll in upper level courses that can count as graduate credits.

Both the MSMS program and the ABT program would benefit by providing an opportunity for ABT students to enroll in a University Scholars program, and with an additional year of study obtain an MSMS degree. The MSMS program would benefit from an increase in enrollment of highly motivated and talented students that are already engaged in basic research. The ABT program would benefit by providing our best undergraduates the opportunity to strengthen their academic position by obtaining an advanced second degree, and making them more competitive for entrance into professional schools, graduate schools, or industry.

Program Structure

ABT students interested in admission to the MSMS University Scholars Program must meet the following requirements.

1. Students must be an undergraduate pursuing a BS in ABT and apply for the University Scholars Program at the end of their junior year. Additionally applicants should have completed

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at least 90 credit hours of work toward the bachelor's degree, or be eligible for senior standing in the semester they are admitted to the program.

2. The applicant must be on track to complete a Bachelor's degree in ABT during the first year of the University Scholars Program.

3. The applicant must have an overall grade-point of 3.2 or above on a scale of 4.0 and must have a grade-point average of 3.5 in ABT (including cross-listed) courses.

4. At the time of application, the applicant must have three of the core ABT courses ABT 301, ABT 360, ABT 361, ABT 460, ABT 461, ABT 495, completed or in progress and have completed ABT 495 or in progress.

5. The applicant must follow the current application procedures for and meet the admission standards of the Graduate School and the MSMS program.

Program of Study

Students who are admitted to the University Scholars Program will be able to follow the course of study available to first-year MSMS graduate students. Students may take up to 12 hours that may be counted towards the ABT Bachelor's and MSMS degree requirements. This program does not change any undergraduate degree requirement. At least 50% of the graduate level coursework must be at the 600 level or above and two-thirds must be in formally organized graduate level courses. Students must also satisfy the core course requirement in the MSMS program.

The Director of Graduate Studies for the MSMS program or a faculty advisor and the student's undergraduate advisor will work together to identify a jointly planned program of study for each individual student. The student's undergraduate advisor will continue to provide advice on the student's undergraduate program. Students will be advised about the two MSMS options, Plan A or Plan B, in accordance with their career goals. Students who elect to follow the Plan A option are required to write a formal master's thesis according to the guidelines established by the Graduate School. Plan A students will work with their mentor and committee to develop a thesis project that is consistent with their area of interest, and may be a logical extension of ongoing work provided it is deemed as being a new project. Plan B does not require a formal written thesis, but does require a final master's exam that involves defense of a relatively short written document covering a student's research project or, if no formal research is conducted, a research paper (e.g., literature review) based on their area of interest and/or specialization.

If a student pursues the Plan A option, (s)he may take up to 12 hours in the first year that will count towards both degrees, and then 12 hours (8 of which are MSMS required core courses) and 6 of XXX 768 Residence Credit for Masters Degree. If a student pursues the Plan B option, (s)he may take up to 12 hours in the first year that will count towards both degrees, and will then need to complete 18 hours of graduate credit in their "graduate" year including 8 hours of

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MSMS required core coursework. This would require students to complete 9 hours per semester during their "graduate" year.

Students in the ABT/MSMS University Scholars Program will be required to complete the core course requirements of the MSMS program, and these graduate courses may count towards the undergraduate degree. The core courses in the MSMS program include IBS 602 Molecular Biology and Genetics, IBS 606 Physiological Communications, TOX 600 Ethics in Scientific Research, and a seminar course in an area of interest. Students would be able to complete the required coursework and add a three credit hour graduate elective that would count towards the 12-hour first year curriculum. Additional graduate coursework available to students in the University Scholars Program includes, but is not limited to:

Anatomy:

ANA 417G Functional Human Neuroanatomy (proposed start date of Spring 2016)

ANA 600 Seminar in Anatomy

ANA 605 Neurobiology of CNS Injury and Repair (alternate years only)

ANA 611 Regional Human Anatomy

ANA 612 Biology of Aging

ANA 631 Advanced Human Anatomy

ANA 638 Developmental Neurobiology (cross listed with BIO/PGY/PSY)

ANA 780 Special Topics in Neurobiology

ANA 790 Research in Anatomy

Biochemistry:

BCH 401G Fundamentals of Biochemistry

BCH 419G Molecular Basis of Human Disease

BCH 604 Structural Biology

BCH 607 Biomolecules and Metabolism

BCH 608 Biomolecules and Molecular Biology

BCH 610 Biochemistry of Lipids and Membranes

BCH 612 Structure and Function of Proteins/Enzyme

BCH 618 Seminar in Biochemistry

BCH 619 Seminar in Biochemistry

BCH 625 Scientific Communications

BCH 640 Research in Biochemistry

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Behavioral Sciences:

BSC 773 Psychosocial Oncology

BSC 778 Behavioral Factors Selected Diseases

BSC 788 Drug Abuse: Contemporary Theories and Issues

BSC 790 Research in Medical Behavioral Sciences

Integrated Biomedical Sciences:

IBS 603 Cell Biology and Signaling

Microbiology:

MI 494G Immunobiology

MI 772 Seminar in Microbiology

MI 798 Research in Microbiology

Pharmacology:

PHA 422G Pharmacology of Treating Human Disease

PHA 621 Principles of Drug Action

PHA 622 Molecular Drug Targets and Therapeutics (4 sections)

Section 001-Cardiovascular Pharmacology

Section 002-Neuropharmacology

Section 003-Chemotherapeutic Agents

Section 004-Autacoids and Endocrine Pharmacology and Toxicology

PHA 750 Research in Pharmacology

PHA 770 Seminar in Pharmacology

Physiology:

PGY 412G Principles of Human Physiology

PGY 502 Principles of Systems Cellular/Molecular Physiology

PGY 512 Evolutionary Medicine

PGY 535 Comparative Neurobiology and Behavior

PGY 612 Biology of Aging

PGY 604 Advanced Cardiovascular Physiology

PGY 638 Developmental Neurobiology (cross listed with ANA/BIO/PSY)

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MSMS required core coursework. This would require students to complete 9 hours per semester during their "graduate" year.

Students in the ABT/MSMS University Scholars Program will be required to complete the core course requirements of the MSMS program, and these graduate courses may count towards the undergraduate degree. The core courses in the MSMS program include IBS 602 Molecular Biology and Genetics, IBS 606 Physiological Communications, TOX 600 Ethics in Scientific Research, and a seminar course in an area of interest. Students would be able to complete the required coursework and add a three credit hour graduate elective that would count towards the 12-hour first year curriculum. Additional graduate coursework available to students in the University Scholars Program includes, but is not limited to:

Anatomy:

- ✓ ANA 417G Functional Human Neuroanatomy (proposed start date of Spring 2016)
- ✓ ANA 600 Seminar in Anatomy
- ✓ ANA 605 Neurobiology of CNS Injury and Repair (alternate years only)
- ✓ ANA 611 Regional Human Anatomy
- ✓ ANA 612 Biology of Aging
- ✓ ANA 631 Advanced Human Anatomy
- ✓ ANA 638 Developmental Neurobiology (cross listed with PGY) *B 10 / P 54*
- ✓ ANA 780 Special Topics in Neurobiology
- ✓ ANA 790 Research in Anatomy

Biochemistry:

- ✓ BCH 401G Fundamentals of Biochemistry
- ✓ BCH 419G Molecular Basis of Human Disease
- ✓ BCH 604 Structural Biology
- ✓ BCH 607 Biomolecules and Metabolism
- BCH 608 Nucleic Acids ✓
- BCH 610 Structure and Function of Biomembranes ✓
- ✓ BCH 612 Structure and Function of Proteins/Enzyme
- BCH 618 Student Seminar ✓
- BCH 619 Student Seminar ✓
- ✓ BCH 625 Scientific Communications
- ✓ BCH 640 Research in Biochemistry

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Behavioral Sciences:

- ✓ BSC 773 Psychosocial Oncology
- ✓ BSC 778 Behavioral Factors Selected Diseases
- ✓ BSC 788 Drug Abuse: Contemporary Theories and Issues
- ✓ BSC 790 Research in Medical Behavioral Sciences

Integrated Biomedical Sciences:

- ✓ IBS 603 Cell Biology and Signaling

Microbiology:

- ✓ MI 494G Immunobiology
- ✓ MI 772 Seminar in Microbiology
- ✓ MI 798 Research in Microbiology

Pharmacology:

- ✓ PHA 422G Pharmacology of Treating Human Disease
- ✓ PHA 621 Principles of Drug Action
- ✓ PHA 622 Molecular Drug Targets and Therapeutics (4 sections)
 - ✓ Section 001-Cardiovascular Pharmacology
 - ✓ Section 002-Neuropharmacology
 - ✓ Section 003-Chemotherapeutic Agents
 - ✓ Section 004-Autacoids and Endocrine Pharmacology and Toxicology
- ✓ PHA 750 Research in Pharmacology
- ✓ PHA 770 Seminar in Pharmacology

Physiology:

- ✓ PGY 412G Principles of Human Physiology
- ✓ PGY 502 Principles of Systems Cellular/Molecular Physiology
- ✓ PGY 512 Evolutionary Medicine
- ✓ PGY 535 Comparative Neurobiology and Behavior
- ✓ PGY 612 Biology of Aging
- ✓ PGY 604 Advanced Cardiovascular Physiology
- ✓ PGY 638 Developmental Neurobiology (cross listed with ANA) *Bio/PSY*

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- ✓PGY 774 Seminar in Physiology
- ✓PGY 791 Research in Physiology

Toxicology:

- ✓TOX 663 Drug Metabolism and Disposition ✓
- ✓TOX 680 Molecular Mechanisms in Toxicology
- ✓TOX 770 Toxicology Seminar
- ✓TOX 780 Special Problems in Toxicology
- ✓TOX 790 Research in Toxicology

Approved by a vote of ABT faculty and the Coordinating Committee (Dr. Daniel Howe, Chair, from Veterinary Sciences, Dr. Michael Goodin, Co-Director of undergraduate studies, from Plant Pathology, Dr. Sharyn Perry, Co-Director of undergraduate studies, from Plant and Soil Sciences, Dr. James Harwood from Entomology, Dr. Robert Houtz from Horticulture, Dr. Luke Moe from Plant and Soil Sciences, Dr. Craig Vander Kooi from Biochemistry, Dr. Xuguo Zhou from Entomology) on 10/03/2014.

Approved by the MSMS program Advisory Committee and administrative contacts for Biomedical Education (Dr. Rebecca E. Dutch, Professor, Associate Dean for Biomedical Education, Dr. Joe Springer, Professor, Director of Graduate Study, Master in Medical Science Program, and the MSMS Advisory Committee members) on 09/29/2014.

Faculty of Record for the ABT-MSMS University Scholars Program

The ABT-MSMS University Scholars Program is an interdisciplinary program consisting of faculty of record with the following appointment affiliations:

College of Medicine: Anatomy and Neurobiology, Behavioral Sciences, Microbiology, Immunology, and Molecular Genetics, Molecular and Cellular Biochemistry, Pharmacology and Nutritional Sciences, Physiology, and Toxicology and Cancer Biology.

College of Agriculture, Food, and Environment: Entomology, Horticulture, Plant Pathology, Plant and Soil Sciences, and Veterinary Sciences.

Student Learning Objectives and Assessment Plan

Upon completion of the ABT-MSMS program, students will have achieved the following learning outcomes:

- *Objective 1: Students will have acquired skills in critical and analytical thinking and in communication that may be applied to career opportunities related to the biomedical field.*

Student Presentation Learning Outcomes:

LO1 - Demonstrate the ability to use technical tools.

LO2 - Able to speak effectively.

LO3 - Able to construct an effective oral presentation with a clear introduction, middle, and conclusion.

LO4 - Able to field questions effectively.

LO5 - Overall evaluation of presentation.

- *Objective 2: Students will have acquired extensive knowledge of the scientific literature and principles related to training and education in the biomedical sciences.*

Final Exam Learning Outcomes:

LO1 - Able to critically analyze literature related to the project and think intellectually about the direction of the project.

LO2 - Able to formulate relevant and testable hypotheses, devise clear experiments for addressing the hypotheses, and analyze and interpret data appropriately.

LO3 - Able to orally communicate data and interpretation effectively with scientific peers, answers questions, and communicates ideas.

LO4 - Able to communicate effectively through scientific writing.

- *Objective 3: Students will have obtained a level of professionalism essential for successful advancement towards entering a health-related professional degree program or furthering career opportunities in the biomedical field.*

Program Completion Learning Outcomes:

LO1 – Demonstrates an appreciation of the biomedical sciences that extends beyond a student's area of specialization.

LO2 – Demonstrates an appreciation of ethical issues and follows ethical responsibilities related to biomedical studies and research.

LO3 – Demonstrates interpersonal skills as reflected by an ability to interact well and contribute to group dynamics as necessary.

LO4 – Demonstrates a positive attitude.

LO5 – Demonstrates a strong work ethic by committing effort required to complete the necessary tasks.

LO6 – Demonstrates the capacity to coordinate group activities and supervise others.

LO7 – Demonstrates a level of responsibility as reflected by the ability to perform essential tasks with minimal supervision.

The progress of each student will be assessed at three time points by the student's advisory committee: at the time of the seminar presentation (Student Presentation rubric), during the final exam (Final Exam rubric), and following completion of the program (Program Completion rubric). The DGS will collect and summarize each assessment to generate an overall measure of student progress. The summary will be included in the annual review of the program. The rubrics for each objective are included below.

**Masters of Science in Medical Sciences
Graduate Student Presentation Review Form**

Student Speaker:
Reviewer:

Date:

Learning outcomes	Excellent 4	Good 3	Average 2	Deficient 1	Score
Demonstrate the ability to use technical tools	Familiar with the A/V equipment, slides easy to read and not overcrowded, heard audibly from every seat in the room, all crucial slides presented long enough for viewing, projected images easily viewable, no typos or slides out of order	Mostly excellent elements with some deficient elements	More excellent elements than deficient elements	Technical bugs not worked out in advance, projection of color choices and slide layouts difficult to read, speaker didn't project well enough to be heard all over the room, went through some slides too fast, overcrowded slides, multiple typos	
Able to speak effectively	Speaker spoke clearly and with an appropriate tempo, there were no distractive movements or gestures by the speaker, the speaker maintained audience attention with eye contact, voice inflection, facial expression, avoided jargon and used simple language, talk was targeted appropriately to the audience	Mostly excellent elements with some deficient elements	More excellent elements than deficient elements	Tempo was either too fast or too slow, speaker had a distractive movement, speaker didn't engage with the audience, speech was full of jargon and not targeted appropriately to the audience	
Able to construct an effective oral presentation with a clear introduction, middle, and conclusion	There was a distinct introduction making it clear what the talk would be about and providing rationale for the work. The middle section was distinct with clear explanation of the techniques and main results, complex ideas simply explained, crucial technical terms clearly defined. The conclusion section was distinct with a summary of the important results and ideas, a clear take home message, applications to future work were clearly defined.	Mostly excellent elements with some deficient elements	More excellent elements than deficient elements	Important background information and rationale for the work was not clearly articulated in the introduction. The middle section was technically difficult to follow and not appropriately targeted to the audience. The conclusions section was just a summary without the speaker putting the work into a larger context including how the results contribute to the scientific knowledge in the field and what future directions to take.	
Able to field questions effectively	The talk stimulated interesting questions, not just clarification of the technical aspects of the work. The speaker repeated questions or paraphrased to clarify and strived to understand questions that were unclear. Questions were answered appropriately. The speaker demonstrated a depth of knowledge about the field and was able to critically apply this knowledge to his/her own work.	Mostly excellent elements with some deficient elements	More excellent elements than deficient elements	There were few questions generated about the content, just clarification of technical aspects that were not clearly presented. The speaker answered questions inappropriately due to failure to understand the question or a failure to understand the larger context of the field. The speaker became flustered or frustrated during the questioning.	
Overall evaluation of presentation	All of the elements of this talk were excellent.	Mostly excellent elements with some deficient elements	More excellent elements than deficient elements	Most of the elements of this talk were deficient.	

Comments:

Suggestions for improvement:

Masters of Science in Medical Sciences Final Exam Assessment

Student:

Date of Exam:

Exam Committee Member:

Learning outcomes	Excellent 4	Competent 3	Marginal 2	Deficient 1	Score
Able to critically analyze literature related to the project and think intellectually about the direction of the project.	Demonstrates a thorough understanding of knowledge in the project area and the ability to consistently discern meaning and relative validity of data in scientific publications. Clear demonstration of independent intellectual contribution, creativity, and original thinking.	Demonstrates an adequate understanding of knowledge in the project area and displays many examples of the ability to discern meaning and relative validity of data in scientific publications. Demonstrates some insight and creativity.	Demonstrates some understanding of knowledge in the project area and some ability to discern meaning and relative validity of data in scientific publications. Minimal evidence of original thinking.	Demonstrates minimal understanding of knowledge in the project area and is unable in most cases to discern meaning and relative validity of data in scientific publications. Lack of creativity or original thinking.	
Able to formulate relevant and testable hypotheses, devise clear experiments for addressing the hypotheses, and, if appropriate, analyze and interpret data appropriately.	Demonstrates a thorough understanding of the scientific method, clear ability to generate hypotheses, understand and design complex experimental protocols, and analyze data with a clear and proper interpretation.	Demonstrates a good understanding of scientific method, generating hypotheses, designing experiments appropriate for addressing hypotheses, and presenting data in an appropriate context.	Demonstrates some understanding of scientific method, needs assistance with complex experimental design and analyzing data, can present and interpret data with some guidance from the PI.	Demonstrates minimal understanding of scientific method, limited ability to conceive of experimental designs to address hypotheses, needs significant faculty input for data analysis and interpretation.	
Able to orally communicate data and interpretation effectively, answer questions, and communicate ideas.	Articulates detailed understanding of project, is able to orally communicate and defend new ideas, thinks effectively on his/her feet, is consistently able to integrate knowledge from multiple disciplines and experience to answer questions or solve problems.	Has appropriate understanding of project, is able to articulate ideas but lacks creativity, can think through basic problems when questioned, and in many cases can integrate knowledge appropriately to answer questions or solve problems.	Has a basic understanding of project but lacks depth, answers basic questions but has difficulty thinking on his/her feet, and is sometimes able to integrate knowledge to answer questions or solve problems.	Lacks understanding of project and is not able to communicate rationale for interpretation of data or direction of the project, and is unable to draw from different areas or experiences to answer questions or solve problems.	
Able to communicate effectively through scientific writing.	Demonstrates a thorough understanding of context, audience, and purpose of the scientific work; uses appropriate, relevant, and compelling content to convey the contribution to the scientific discipline; pays detailed attention to and successfully uses conventions particular to manuscript and grant writing including organization, content presentation, formatting, and style; uses relevant and credible references appropriately, uses appropriate language that skillfully communicates meaning to readers with clarity and fluency, and is nearly error free.	Demonstrates adequate consideration of context, audience and purpose of the scientific work; uses many examples of appropriate, relevant and compelling content to convey the contribution to the scientific discipline; consistently uses manuscript and grant writing conventions including organization, content, presentation, and style; consistently uses appropriate references to support ideas; uses clear language that generally conveys meaning to readers, with few errors.	Demonstrates awareness of context, audience, and purpose of the scientific work; uses some examples of appropriate, relevant and compelling content; follows expectations appropriate to manuscript and grant writing for basic organization, content, and presentation; attempts to use credible and/or relevant references to support ideas; uses language that generally conveys meaning with clarity, though with errors	Demonstrates minimal attention to context, audience, purpose of the scientific work; uses appropriate and relevant content to develop simple ideas in parts of the work; attempts to use a consistent system for basic organization and presentation; attempts to use sources to support ideas; uses language that sometimes impedes meaning because of errors in usage.	

Comments:

Masters of Science in Medical Sciences Program Completion Assessment

Student:
Committee Member:

Date of Assessment:

Learning outcomes	Excellent 4	Competent 3	Marginal 2	Deficient 1	Score
Basic interest in biomedical science. Does the student demonstrate an appreciation of biomedical sciences that extends beyond their area of specialization?	Interested in broad area of biomedical sciences	Interested in sciences that support area of specialization	Limited interest in biomedical science	No interest in biomedical science	
Ethical considerations. Does the student appreciate and follow established norms of ethical responsibility in biomedical studies and research?	Highly ethical	Ethical	Inconsistent ethical behavior	Some question of ethical behavior	
Interpersonal skills. Does the student interact well and contribute to groups as necessary?	Team player, collegial	Potential for collegiality as maturity develops	Somewhat collegial, but no evidence for further development	Not a team player, inappropriate behavior	
Attitude. Is the student personable and interactive?	Makes a positive impression on first contact that is sustained	Has potential and indicators suggest improvement with maturity	Some potential for improvement exists	Negative interactions and no indication for improvement	
Work habits. Does the student commit the effort required to complete assigned tasks?	Dedicated and takes initiative to be productive	Productive	Not very productive	No initiative to be productive	
Leadership. Does the student demonstrate the capacity to coordinate group activities and supervise others?	Evidence of exceptional leadership	Acceptable level of leadership and potential with maturity	Some leadership potential with less clear potential for future development	No leadership capability or potential	
Responsibility. Can the student be counted on to perform required tasks with minimal supervision?	Highly responsible	Appropriate level of responsibility	Limited level of responsibility with some evidence for improvement	Minimal responsibility with no evidence for improvement	

Comments:

Admission to the University Scholars Program

The University Scholars Program offers particularly gifted and highly motivated students the opportunity of integrating their undergraduate and graduate courses of study in a single continuous program culminating in both a baccalaureate and a master's or doctoral degree. The total number of hours for the combined program may be as many as 12 less than the total required for the bachelor's and the master's or doctoral degrees separately. The requirements for the bachelor's degree are unaffected.

Application to the program should be submitted at the end of the student's junior year. Applicants should have completed at least 90 credit hours of work toward the bachelor's degree, or be eligible for senior standing in the semester they are admitted to the program. The master's program should be in the field of the undergraduate major (there are some exceptions made), and the undergraduate grade point average must be at least a 3.50 in the applicant's major field and 3.20 overall. Applicants to a University Scholars program must submit both a Graduate School application and a University Scholars form with all requested signatures.

[University Scholars Program Application form](#)

Baccalaureate/masters University Scholars programs are currently offered in:

Accounting	German
Agricultural Engineering	History
Anthropology	Information Communication Technology
Biomedical Engineering	Manufacturing Systems Engineering
Biosystems and Agricultural Engineering	Materials Science and Engineering
Chemical Engineering	Mathematics
Chemistry	Mechanical Engineering
Civil Engineering	Mining Engineering
Classics	Music
Communication	Nutrition and Food Science
Computer Science	Philosophy
Diplomacy and International Commerce	Physics
Electrical Engineering	Public Administration
Family Studies	Rehabilitation Counseling
Forestry	Sociology
French	Spanish
Geography	Statistics

UNIVERSITY SCHOLARS PROGRAM PLAN SHEET

NAME: _____
Last
First
M.I.

SOCIAL SECURITY #: ____/____/____

GRADUATE LEVEL COURSES USED FOR UNDERGRADUATE CREDIT ONLY		GRADUATE LEVEL COURSES TO BE COUNTED TOWARD BOTH DEGREES (maximum of 12 hours)		GRADUATE LEVEL COURSES USED FOR GRADUATE CREDIT ONLY	
COURSE PREFIX-NUMBER	CREDIT HR	COURSE PREFIX-NUMBER	CREDIT HR	COURSE PREFIX-NUMBER	CREDIT HR
TOTAL CREDITS: _____		TOTAL CREDITS: _____		TOTAL CREDITS: _____	

PLAN A MASTERS
 PLAN B MASTERS

I APPROVE THIS UNIVERSITY SCHOLARS PROGRAM PLAN:

_____ DATE: _____
 Director of Graduate Studies

FORMULA FOR DEGREE:

TOTAL NUMBER OF HOURS REQUIRED FOR BACHELOR'S DEGREE: _____

PLUS TOTAL NUMBER OF HOURS REQUIRED FOR MASTER'S DEGREE: _____

SUB-TOTAL: _____

MINUS NUMBER OF HOURS ALLOWED AS CROSSOVERS (12 MAXIMUM): _____

SUB-TOTAL: _____

MINUS TOTAL NUMBER OF HOURS REQUIRED FOR BACHELOR'S DEGREE: _____

TOTAL NUMBER OF GRADUATE CREDITS REQUIRED FOR MASTERS DEGREE: _____

SIGNATURE ROUTING LOG

General Information:

Proposal Type: Course Program Other

Proposal Name¹ (course prefix & number, pgm major & degree, etc.): MSMS University Scholars Program for ABT Undergraduates

Proposal Contact Person Name: Dr. Joe Springer Phone: 323-1440 Email: jspring@uky.edu

INSTRUCTIONS:

Identify the groups or individuals reviewing the proposal; note the date of approval; offer a contact person for each entry; and obtain signature of person authorized to report approval.

Internal College Approvals and Course Cross-listing Approvals:

Reviewing Group	Date Approved	Contact Person (name/phone/email)	Signature
ABT Coordinating Committee	10/03/2014	Dr. Dan Howe / 218-1113 / daniel.howe@uky.edu	
Undergraduate Curriculum Committee, College of Agriculture, Food and Environment	11/07/2014	Larry Grabau / 257-3469 / lgrabau@uky.edu	
		/ /	
		/ /	
		/ /	

External-to-College Approvals:

Council	Date Approved	Signature	Approval of Revision ²
Undergraduate Council			
Graduate Council			
Health Care Colleges Council			
Senate Council Approval		University Senate Approval	

Comments:

¹ Proposal name used here must match name entered on corresponding course or program form.

² Councils use this space to indicate approval of revisions made subsequent to that council's approval, if deemed necessary by the revising council.

Ellis, Janie

From: Nikou, Roshan
Sent: Monday, December 22, 2014 1:08 PM
To: Brothers, Sheila C; Carvalho, Susan E; Ellis, Janie; Ett, Joanie M; Hippisley, Andrew R; Jackson, Brian A; Lindsay, Jim D.; Nikou, Roshan; Price, Cleo; Timoney, David M
Cc: Perkins, Andrea L; Wang, Cecilia; Toland, Michael D; Buntin, William J; Crystal, Ralph; Springer, Joe E
Subject: Transmittals
Attachments: Program_Change_MPH-signed.pdf; MA Philosophy-signed.pdf; MS in ABA-signed.pdf; ABT-MSMS University Scholars Proposal.pdf

TO: Andrew Hippisley, Chair and Sheila Brothers, Coordinator
Senate Council

FROM: Brian Jackson, Chair and Roshan Nikou, Coordinator
Graduate Council

Graduate Council approved the following proposals and is now forwarding them to the Senate Council to approve. All the courses listed below have been forwarded to the Senate Council via e-Cats.

Programs and Certificates

Master of Public Health

University Scholars for MA in Philosophy

MS in Applied Behavior Analysis

University Scholars for MS in Medical Sciences

Courses

MUS 648 Music Software Technology

MUS 731 Music Perception and Cognition

MUS 760 Music Research III

CPH 710 Adverse Events in Healthcare

LIS 690 Special Topics in Library and Information Science

EDP 656 Methodology of Educational Research

Roshan Nikou

The Graduate School

The University of Kentucky

101 Gillis Building - 0033

Phone: (859) 257-1457

Fax: (859) 323-1928

Roshan.Nikou@uky.edu