

## Graduate College (Interdisciplinary Programs)

Submitted Fall 2012 for Catalog Year 2013-2014

### I. SIGNIFICANT TRENDS:

*The Interdisciplinary Programs are continually changing and refining their courses to meet the needs of the programs. Often the interdisciplinary courses are cross listed because of the strong connections to several programs.*

### II. CURRICULA, MAJORS, MINORS ADDED OR DROPPED:

None.

### III. NEW COURSES:

Code	Title	Contact Hours	Credits
BRT 506C	Biobased Products Seminar: Research Presentations	(1-0)	1
BRT 507	Entrepreneurship in Biorenewables	(1-0)	1
BRT 515	Biorenewables Law and Policy	(3-0)	3
GERON 520	Women and Aging	(3-0)	3
GERON 521	Biological Principles of Aging	(3-0)	3
GERON 522	Long-Term Care	(3-0)	3
GERON 523	Mental Health and Aging	(3-0)	3
GERON 524	Cognitive Health	(3-0)	3

### IV. COURSES DROPPED:

BRT 506R	Deleted	Biobased Products Seminar, one section	
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### V. NUMBER, CREDIT, AND TITLE CHANGES:

Code	Field Name	Old Value	New Value
GERON 584	Summer Offering Alternating Year	Alternate, Offered 2012	
GERON 594	Summer Offering Alternating Year	Alternate, Offered 2013	
NEURO 557	Spring Offering Alternating Year	Alternate, Offered 2013	Alternate, Offered 2015
BRT 506A	Prerequisites	Undergraduate training in an engineering or physical or biological discipline or degree in agriculture or economics	enrollment in BRT graduate certificate Program; undergraduate training in an engineering or physical or biological discipline or degree in agriculture or economics
BRT 506B	Prerequisites	Undergraduate training in an engineering or physical or biological discipline or degree in agriculture or economics	enrollment in the BRT graduate certificate program; undergraduate training in an engineering or physical or biological discipline or degree in agriculture or economics

BRT 506	Description	Taken one semester for 1 credit and remaining semesters as R credit. Seminars and discussion on current topics in biorenewable resources and technology.	Continual in-depth view of the multi-disciplinary nature of biorenewables research, programs, and people involved in this field of study. Seminar and/or research poster presentations.
BRT 506A	Description	Taken one semester for 1 credit and remaining semesters as R credit. Seminars and discussion on current topics in biorenewable resources and technology.	Students are required to review five seminar videos from approved selection and write a critical summary of each seminar video. Not available for on-campus BRT students.
BRT 506B	Description	Taken one semester for 1 credit and remaining semesters as R credit. Seminars and discussion on current topics in biorenewable resources and technology.	Attendance at approved seminars on-campus related to biorenewable resources and technology.
GENET 539	Description	Introduction to Bioethics through case study discussion and recent news events. Students read and discuss issues on animal moral theory and rights, animals used in research and teaching, cloning, human reproductive and stem cell research, human genetic screening, environmental ethics, world food and population issues, GMO, plant biotechnology, genetic patenting issues and honesty in science. Students present formal presentation on topic of choice.	Introduction to Bioethics through case study discussion and recent news events. Students will read and discuss contemporary issues in science ethics, including some of the following topics: ethics and responsible research practice, animal ethics and the use of animals in teaching and research, cloning, human reproductive and stem cell research, regulation of genetically modified crops and foods, plant biotechnology, gene patents. Students will be divided into groups to develop their own case study, to be presented in class at the end of the term. Offered on a satisfactory-fail basis only
GERON 545	Description	WWW only. Policy development in the context of the economic status of the older adult population. Retirement planning and the retirement decisions; social security and public transfer programs; intra-family transfers to/from the aged; private pensions; financing medical care; prospects and issues for the future.	Policy development in the context of the economic status of the older adult population. Retirement planning and the retirement decisions; social security and public transfer programs; intra-family transfers to/from the aged; private pensions; financing medical care; prospects and issues for the future.
GERON 584	Description	WWW only. Overview of program evaluation, research methods, and grant writing in gerontology. Includes application of quantitative and qualitative methods in professional settings.	Overview of program evaluation, research methods, and grant writing in gerontology. Includes application of quantitative and qualitative methods in professional settings. (on-line course offering via Distance Education)

GERON 594	Description	WWW only. An integrative experience for gerontology students designed to be taken near the end of the degree program. By applying knowledge gained in earlier coursework, students will strengthen skills in ethical decision-making behavior, applying these skills in gerontology-related areas such as advocacy, professionalism, family and workplace issues. Students from a variety of professions will bring their unique perspectives to bear on topics of common interest.	An integrative experience for gerontology students designed to be taken near the end of the degree program. By applying knowledge gained in earlier coursework, students will strengthen skills in ethical decision-making behavior, applying these skills in gerontology-related areas such as advocacy, professionalism, family and workplace issues. Students from a variety of professions will bring their unique perspectives to bear on topics of common interest. (on-line course offering via Distance Education)
NEURO 557	Description	Research methods and techniques; exercises and/or demonstrations representing individual faculty specialties.	Research methods and techniques; lectures, laboratory exercises and/or demonstrations representing individual faculty specialties.
TOX 515	Description	Regulatory toxicology in the real world. Approaches used by toxicologists in regulatory agencies for generating, enforcing and complying with laws and regulations in an unambiguous, defensible manner. Different obligations of scientists in research and regulatory settings. Perform simple risk assessments and suggest ways of dealing with data gaps. Examine strengths and weaknesses of common approaches used by regulatory agencies.	Survey of approaches used by toxicologists in government and industry for generating, enforcing and complying with laws and regulations. Examine policies from multiple regulatory agencies and how risk-based decisions are made. Perform simple risk assessments and suggest ways of dealing with data gaps. Explore new types of data used in risk assessments. Taught online only.
BCB 660	Credit Hours Max	2	4, 1-4
BRT 506A	Credit Hours Low/Fixed		1, fixed, repeatable
NEURO 557	Credit Hours Low/Fixed	2	3, changed from 2 to 3

## VI. COURSES ADDED FOR NONMAJOR GRADUATE CREDIT

## VII. COURSES DROPPED FOR NONMAJOR GRADUATE CREDIT

## VIII. SUMMARY OF CHANGES:

*Note: a cross-listed course should be counted only once - with the "primary" department or program. So in Section III New Courses and Section IV Courses Dropped, a cross-listed course should be listed only once.*

<b>Summary of Changes</b>	
Added	8
Credit Hours Low/Fixed	2
Credit Hours Max	1
Deleted	1
Description	9
Prerequisites	2
Spring Offering Alternating Year	1
Summer Offering Alternating Year	2
<b>Grand Total</b>	<b>26</b>

## IX. Changes since Proposed Departmental Changes for General Review

None

## X. JUSTIFICATION FOR NEW COURSES (attach Excel spreadsheet)

Code	Title	Justification
BRT 506C	Biobased Products Seminar: Research Presentations	BRT added a new section to expand topics of research presentations for students.
BRT 507	Entrepreneurship in Biorenewables	Course to address developing a business in biorenewables.
BRT 515	Biorenewables Law and Policy	Course to address the history of law and policy for biorenewables as it interacts with the new laws and policies.
GERON 520	Women and Aging	Elective courses for the MFCS Gerontology specialization for the GP-IDEA program.
GERON 521	Biological Principles of Aging	Same for all new GERON courses.
GERON 522	Long-Term Care	Same for all new GERON courses.
GERON 523	Mental Health and Aging	Same for all new GERON courses.
GERON 524	Cognitive Health	Same for all new GERON courses.