MINUTES
THE WEST VIRGINIA UNIVERSITY FACULTY SENATE
NOVEMBER 13, 2006

1. Professor Parviz Famouri, Faculty Senate Chair, called the meeting to order at 3:15 PM in Assembly Rooms A/B, NRCCE.

Member Present:

Ameri, S	Culberson, J.	Howard, S.	Napolitano, M.	Stockdale, T.
Atkins, C.	D'Souza, G.	Jacknowitz, A.	Nestor, P.	Stolzenberg, A.
Banta, L.	Davari, A.	Jones, R.	Nutter, R.	Stuchell, R.
Behling, R.	Dillis, C.	Kite, S.	Olson, K.	Tauger, M.
Bergner, G.	Dixon, S.	Kleist, V.	Peace, G.	Townsend, C.
Bilgesu, I.	Etzel, E.	Kuhlman, J.	Petronis, J.	Urbanski, J.
Bonner, D.	Fitch, C.	LaGodna, B.	Putman, H.	Valenti, M.
Bowen, E.	Gladwin, M.	Lake, M.	Riley, W.	Verlinden, S.
Branch, D.	Griffith, R.	Lastinger, M.	Royall, B.	Vona-Davis, L
Brooks, R.	Hall, D.	Long, K.	Sand-Jecklin, K.	Weihman, L.
Brown, G.	Hartman, K.	Mandich, M.	Sedgeman, J.	Wilcox, G.
Bryan, W.	Held, J.	Mays, M.	Selin, S.	Woloshuk, J.
Bryner, R.	Hill, R.	McDiarmid, M.	Shelton, E.	
Buchanan, T.	Hoey, J.	McGinley, P.	Sherwood, L.	
Campbell, L.	Hornak, L.	Melton, P.	Steranka, P.	
Cohen, S.	Hornsby, G.	Miller, M.	Stewart, B.	

Members Absent:

Abbott, J.	Cottrell, S.	Hurst, M.	Mullett, C.	Shambaugh, N.
Almond, C.	Cumming, J.	Iskander, W.	Mutz, C.	Siegrist, J.
Anderson, R.	Dedhia, H.	Kershner, R.	Nath, C.	Simile, R.
Bagby, M.	Douglas, W.	Latimer, M.	Nuss, M.	Valentine, S.
Canfield, P.	Garbutt, K.	Lively, M.	Price, S.	Walker, E.
Clark, N.	Gerbo, R.	Mancinelli, C.	Richards, A.	Wright, F.
Cook, L.	Graeber, J.	McNerney, K.	Riemenschneider, S.	
Cottrell, L.	Grose, K.	Morgan, D.	Robbins, J.	

2. Provost Lang reported that the Board of Governors met last Friday and the results of the first year's strategic planning activities were presented. He said the report captures the hard work and efforts of the campus that were done over the last year. The implementation team met regularly for the last year and half, and much attention was given to the goals and activities of the plan. The Provost said the report was favorably received by the BOG and it is posted on the strategic planning website. Hard copies will be available in the near future. The Provost stood for questions concerning the plan.

3. It was moved and duly seconded to approve the minutes from the October 9, 2006 meeting. Motion carried.

4. Chair Famouri reported on the following issues:

   - Faculty Senate members Ruth Kershner, Michael Lastinger and Marcello Napolitano were nominated to serve on the Transportation and Parking Committee.

- The Student Government Association is heading up a committee for "childcare," and ten people are needed to serve. If anyone is interested in this committee, e-mail Chair Famouri.
- The purpose of the "consultant" for the Presidential Search Committee is to help and make sure there are no "surprises." The Committee was in Morgantown, and they met with distinguished faculty across the campuses as well as the Senate Executive Committee; excellent points were discussed.
- The Chair talked with Governor Manchin at a WVU-football game, and he let him know that the future of WVU, the land-grant Institution lies with faculty. He also relayed the message to Secretary of State, Betty Ireland.
- The Chair attended an Advisory Council of Faculty meeting last month in Beckley, WV. He asked that when the ACF met for deliberations, the members would take into consideration that WVU is a land-grant University.
- Chancellor Noland will speak at the December 11th meeting.
- The President and Susan Hardesty have invited senators and spouses to a holiday reception from 5:00 p.m. to 6:30 p.m. on December 11th The Chair encouraged all senators to attend.
- The Chair said Professor's Stitzel and Orndorff were recognized as "the Most Loyal Mountaineers," and they were presented awards at the WVU football game.
- The Chair said Professor Branch requested that, "new business" be placed at the top of the monthly Faculty Senate agenda instead of at the end. "Robert's Rules of Order" was reviewed, which said that if the order of business was to be revised, it could be done by a 2/3 vote and written documentation submitted. Parliamentarian, Vivian Hamilton, said that if the Senate would want to occasionally change the agenda, a motion could be made during that meeting to revise the order, but if a permanent revision is recommended, then a 2/3 vote and written documentation is needed. She also said that senators can let the Chair and the Faculty Secretary know that a new business item will be discussed at the next meeting so the item can be placed on the agenda.

5. Chair Famouri said the current chair-elect, Professor Kevin Outterson, will be leaving the University; therefore, he has resigned from his post. The floor was open for nominations; on behalf of the Senate Executive Committee, Professor McDiarmid nominated Professor Steve Kite. Nominations were closed. Professor Kite spoke before the Faculty Senate concerning his candidacy. By a vote of acclamation, it was moved and duly seconded to approve Steve Kite as the Faculty Senate Chair-elect. Motion carried.

6. The following Curriculum Committee and General Education Oversight Committee Reports were approved from the consent agenda:

   For Approval – New Courses and Course Changes – Annex I
   For Approval – Proposal for a Major in Agroecology – Annex II
   For Approval – Proposal for a Major in Applied and Environmental Microbiology – Annex III
   For Approval – Proposal for a Major in Soil Sciences – Annex IV

For Approval – Proposal for a Change in the Horticulture Major Curriculum – Annex V
For Approval – Proposal for a Change in the Agronomy Major Curriculum – Annex VI
For Approval – Proposal to Delete the Environmental Protection Curriculum – Annex VII
For Approval – Proposal for a Minor in Equine Management – Annex VIII
For Information – Alteration Report – Annex IX

For Approval – Resolution & GEC-LSP Course Actions – Annex X

6. Mr. Joe Fisher, Associate VP for Facility and Services, gave an overview concerning the progress that WVU is making toward recycling, transportation and parking, and energy efficiency. The report can be reviewed at http://www.wvu.edu/~facultys/Nov 2006 Green presentation to Faculty Senate.ppt. Mr. Fisher stood for questions.

7. Professor Roy Nutter, Advisory Council of Faculty representative, said the ACF met on October 19th in Beckley, WV. He said an ACF representative from WVUIT expressed faculty concern with WVU concerning the Promotion & Tenure processes and expectations, which is an on-going concern. He said LOCEA, which is the Legislative Oversight Committee for Education met in October, and a matter of interest was that 2-year tuition costs were as high and higher as the 4-year tuition costs state-wide. Professor Nutter said LOCEA requested a faculty study be done, so a committee was formed and co-chaired by Associate Provost C.B. Wilson. The committee will present a report within the next couple of months. The Higher Education Policy Commission met in Charleston, and the ACF presented its legislative agenda; discussion is still taking place concerning the tuition waivers for dependents of employees.

8. The meeting adjourned at 4:45 p.m. to reconvene on Monday, December 11, 2006.

Mary Strife
Faculty Secretary

To: Faculty Senate Executive Committee
From: Gwen Bergner, Chair, Faculty Senate Curriculum Committee
Date: October 23, 2006
Re: New Courses and Course Changes

EBERLY COLLEGE OF ARTS AND SCIENCES
Communication Studies

New Course:

COMM 410. Family Communication. 3-Hr. This course explores the components and dynamics of human communication within the family unit. The student will examine research, various communication models, principles and theory that are relevant to family communication. (Effective Term: Summer, 2006) (CIP – 099999)

Rationale: This course adds an option (course) in the area of family communication, which currently is unavailable in the Communication Studies curriculum. A course in family communication is key to any university communication curriculum for many reasons. Not only is family life a universal human experience, but the family is a powerful influence on our lives and on society in general. Families are comprised of relationships between and among individuals. Like all human relationships, family relationships are driven by communication. Communication behaviors and dynamics learned in our families impact on how we relate to others throughout life. Since society is comprised of human relationships, in a very real sense, family communication impacts directly and profoundly on society. A family communication course is essential to the WVU Dept of Communication Studies, because it offer students the opportunity not only to increase understanding of their own family communication behaviors and dynamics within their own families, but also provides a chance to improve their communication skills. A course in family communication is critical to any departmental communication program. The course materials provide students with a necessary understanding of cogent complex communication principals that are significant and relevant not only to the departmental communication program in general, but also to the student's place in that society. This course would count towards credit for the major, but would not be necessarily be required for the major (or for the minor). The family communication course will enrich the general education curriculum relative to both the individual in Society and to Contemporary Society. Relevance to the Individual in Society: Communication within families is intricately linked to such critical issues as individual self-esteem, the individual's ability to communicate not only within our home, but in society as well. Self esteem and learned communication behaviors impact on such vital issues as an individual's lifelong ability to successfully relate and connect to society throughout life. Relevance to Contemporary Society: It is difficult to differentiate between the individual and contemporary society in the context of family communication, because, generally speaking society is merely an extension of the individual. However, a few key communication-linked social issues should be addressed: Problem-solving and conflict resolution skills are primarily products of learned communication skills and behaviors. Research supports the notion that problem and conflict resolution methods used within families are closely related to family satisfaction and effective communication behaviors. Conversely, the inability to resolve conflicts and solve problems within families has been found to result in negative relational outcomes and

even in family violence. Family violence is a critical problem in contemporary society: Its effects are insidious and keenly impact on other social issues such as child abuse, spousal abuse, homelessness and even loss of life. In sum, a course in family communication is necessary and vital to our Dept of Communication Studies program at WVU because understanding the relevant communication concepts and learning how to apply those concepts within our families is key both to the individual in society and to the contemporary society in general.

English
New Course:

ENGL 339. Theater Tour. 3-Hr. Introduces students to texts in performance by reading dramatic texts and traveling to see those texts in performance. Performance sites may include either international or U.S. locations. (Effective Term: Fall, 2006) (CIP – 230101)

Rationale: This course fits into the genre sequence in English department curriculum, and will meet program needs as an option for upper-division hours required by English majors and minors.

DAVIS COLLEGE OF AGRICULTURE, FORESTRY AND CONSUMER SCIENCES
Health Nutrition and Foods

New Course:

HN&F 200. Nutrition/Activity/Health. 3-Hr. PR: HN&F 171. An overview of how proper nutrition and physical activity relates to individual health and disease prevention. (Effective Term: Spring, 2007) (CIP – 190501)

Rationale: Students in dietetics and sport related majors have a general interest in the area. It will help them better understand the relationship between nutrition and physical activity. This course can be an elective for students in any major.

Agriculture and Environmental Education Environment

New Courses:

AGEE 434. Managing Learning Envrnment. I. II. 3-Hr. PR: AGEE 430 or Consent. Principles/process in organizing and managing all components of the secondary agricultural education learning environment to maximize student achievement. (Effective Term: Fall, 2006) (CIP – 131301)

Rationale: For a number of years Agricultural and Extension Education has offered "Managing the Learning Environment" as a special topics course. The course is a crucial component of the curriculum required by the State Department of Education for certification as an agricultural education teacher. Because the class is required for teacher certification, we see the need to formally add the class to the Agricultural and Extension Education curriculum.

AGEE 642. Ag Ed Research Methods/Design. I. 3-Hr. Explores definition of the problem, identification of related literature, selection of an appropriate research design, interpretation of results from data analysis procedures, and the reporting of research findings with emphasis on agricultural education. (Effective Term: Fall, 2006) (CIP – 131301)

Rationale: This course was developed for agricultural education majors and others interested in social science research. The course, currently being taught as a special topic class, draws students from a number of disciplines in the Davis College. The course prepares students in research methodology necessary to plan and conduct social science research studies. The course is required of all students pursuing a Master of Science Degree in Agricultural Education.

AGEE 438. Ag Ed Curriculum Development. II. 2-Hr. PR: AGEE 430 or Consent. Development, organization, preparation and evaluation of materials/curriculum for teaching agriculture in middle and secondary schools. (Effective Term: Spring, 2007) (CIP – 131301)

Rationale: The West Virginia State Department of Education mandates minimum content of all secondary agricultural education courses through Content Standards and Objectives (CSOs). Teachers are held accountable for the CSOs through end-of-course tests for many of the agricultural education courses. In order for preservice agricultural education teachers to make a smooth transition into the profession, they must be prepared to establish a Course of Instruction (COI) based on local need and the state CSOs. They must also be prepared to develop curriculum and evaluate student achievement based on the established COI. This course is designed to meet that need in the Agricultural and Environmental Education's preservice teacher education program.

AGEE 644. Data Analysis/Interpretation. II. 3-Hr. Explores the selection of appropriate statistical methods, use of statistical software packages to analyze data, interpretation of results from data analysis procedures, and the reporting of research findings with emphasis on agricultural education. (Effective Term: Spring, 2007) (CIP – 131301)

Rationale: This course was developed to fill a deficiency identified in the graduate curriculum for those conducting research in social science fields such as agricultural education. Students were not prepared to select statistical procedures based upon the types of data in their research, determine/interpret the practical significance of statistical analysis procedures, and write the results in a manner acceptable for the professional community. This course, first taught as a special topic in 2002, will fill that void for graduate students regardless of discipline. The course will teach students to select data analysis procedures based on the "scale of measurement," use standard statistical packages (SPSS PC) to analyze data, interpret results from SPSS data analysis procedure, and write the results in a manner publishable in most agricultural education publications. The course is required of all students pursuing a Master of Science Degree in Agricultural Education.

AGEE 651. Program Evaluation in Comm. Ed. 3-Hr. Evaluation principles, models, designs and procedures used in developing and analyzing, agricultural and extension education programs. Evaluations role in needs assessments, implementation and marketing to stakeholders. (Effective Term: Fall, 2006 (CIP – 131301)

Rationale: This course has been offered as a special topic course over the past 4 years to provide in depth exploration and application of evaluation techniques as applied to community education settings. With changes in the department emphasis to include Extension education, the necessity of evaluation skills for survival as an Extension agent and to be able to develop evaluation components for grant development makes this course a vital component to the Agricultural and Extension Education Program.

Course Change:

From:

AGEE 442. Prgm Devlp/Eval-Extensn 3 Hr. Planning, implementation and evaluation of programs in rural and community development. (Effective Term: Fall, 2006) (CIP-131301)

To:

AGEE 650. Program Development in Comm. Ed 3 Hr. Planning, implementation and evaluation of programs in non-formal rural and community educational settings. (Effective Term: Fall, 2006) (CIP-131301)

Rationale: Through its Master of Science degree, Agricultural and Extension Education is playing a major role in educating extension agents in the procedures of serving as an Extension agent. Program development is a major responsibility of all agents. The content of the course has been reorganized and additional academic rigor added to make it a graduate only (600) level course. The changes were made to establish the course as a major component in the program of study for students pursing an Extension focus for the Master of Science degree in Agricultural Education.

SCHOOL OF PHYSICAL EDUCATION

New Courses:

PE 119. Track & Field/Weight Conditioning. 1-Hr. Introduction to basic weight training techniques for track and field. (Effective Term: Fall, 2006) (CIP-131314)

Rationale: Students will learn proper techniques and execution of all specific training modalities appropriate for all division I track athletes.

PE 106. Rowing Conditioning/Weight Training. 1-Hr. Hands on approach to proper techniques of strength and conditioning as it applies to Rowing athletes. (Effective Term: Fall, 2005) (CIP-131314)

Rationale: Athletes will learn proper techniques and execution of all specific training modalities appropriate for division I rowing athletes.

Proposal for an Agroecology Major
Under the Bachelor of Science in Agriculture in the
Plant and Soil Sciences Degree Program

The Division of Plant and Soil Sciences proposes to offer a new Agroecology major under the existing Bachelor of Science in Agriculture degree in the Plant and Soil Sciences Degree Program. Agroecology is the interdisciplinary study of how agriculture production of plants and animals affects and is affected by the local environment. Agroecology emphasizes sustainable and environmentally friendly approaches to agricultural production. The Agroecology major would combine the concepts of crop production with those of environmental protection in such a way that there is a sustained balance between production and environmental issues.

The objective of the major is to provide students the opportunity to specialize in the ecological/sustainable aspects of crop production. This objective can only be achieved when students are grounded in the crop production aspects of agriculture and the protection of soil, water and other components of the environment in which agricultural production occurs.

This major as proposed would require no new courses, faculty or facilities. The major is possible from a new combination of existing courses and programs in the Division.

Overview of the Proposed Major

The Agroecology major is based on the current disciplines and faculty strengths in the Division including crop science, soil science, horticulture, environmental protection and pest management. The Division currently offers numerous courses that have both agricultural and environmental application. Current and prospective students are interested in topics such as sustainable farming and natural resource conservation. Faculty in the Division receive grant funding and conduct research that focuses on the interface between production and protection, including work at our nationally recognized certified organic farm that emphasizes a sustainable agroecological approach.

The faculty also are nationally known for their work in soil science as it relates to environmental protection and land use. The USDA-Natural Resources Conservation Service National Geospatial Development Center located at WVU is an additional resource that would support this major.

Details of the Proposed Major

The Division currently offers five minors related to agriculture production and environmental protection. We are proposing that a new major be approved in Agroecology for students who complete the standard GEC requirements; 45 hrs. in agriculture, 34 of which are required courses; the soil science minor; and any two other minors offered by the Division. Details of the minors and other features of this proposed curriculum are set forward in exhibit A. The major would have a BS in Agriculture designation; require two capstone courses and a total of 128 hrs. No other institutions in the state offer this or a similar major nor have the expertise or courses to establish such a major.

We anticipate that once this major is established and advertised it will attract 10-15 students per year. Graduates from the program would be employable in both traditional agriculture positions and those which seek an employee with an environmental orientation toward agricultural production. Potential areas of employment include: farm and environmental consulting, organic farms, natural settings with high public use such as parks, lawn care and maintenance companies; sales representatives for agriculture suppliers; extension agents; and government support agencies. Graduates may also be in a position to establish their own business.

Exhibit A

B.S. IN AGRICULTURE DEGREE
PLANT AND SOIL SCIENCE PROGRAM
AGROECOLOGY MAJOR
DIVISION OF PLANT AND SOIL SCIENCES
DAVIS COLLEGE OF AGRICULTURE, FORESTRY & CONSUMER SCIENCES

NAME _____ **DATE ENROLLED IN HIGHER EDUCATION** _____
STUDENT NUMBER _____ **ANTICIPATED GRADUATION DATE** _____

	HRS	GRADE
Communication (GEC Obj. #1) (6 hr)		
ENGL 101	**3**	_____
ENGL 102	**3**	_____
Basic Math and Science (Includes GEC Obj. #2) (14 hr)		
CHEM 111	**4**	_____
CHEM 112	**4**	_____
MATH 126	**3**	_____
STAT 211	**3**	_____
The Past and Its Traditions (GEC Obj. #3)		
Elective _____	**3**	_____
Contemporary Society (GEC Obj. #4)		
Elective _____	**3**	_____
Artistic Expression (GEC Obj. #5)		
Elective _____	**3**	_____
The Individual in Society (GEC Obj. #6)		
AGRL 111	1	_____
Elective _____	3	_____
American Culture (GEC Obj. #7)		
Elective _____	**3**	_____
Western Culture (GEC Obj. #8)		
Elective _____	**3**	_____
Non-Western Culture (GEC Obj. #9)		
Elective _____	**3**	_____

FREE ELECTIVES (7 hr)

_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____

AGRICULTURE (45 Hrs - See Note Below)[+]

REQUIRED AGR COURSES (34 hr):	**HRS**	**GRADE**
ARE COURSE _____	**(3)**	_____
AGRN 202, 203 _____	**(4)**	_____
A&VS 251 _____	**(4)**	_____
ENVM 341 _____	**(4)**	_____
ENTO 404 _____	**(4)**	_____
GEN 371 _____	**(4)**	_____
PPTH 401 _____	**(4)**	_____
PLSC 206 _____	**(4)**	_____
PLSC 453 _____	**(3)**	_____

[+]This degree requires a minimum total of 45 hours in AGRICULTURE, which may be met by agriculture courses in this curriculum. Note that AGRL 111 (GEC Obj. #6) and STAT 211 are accepted as part of the required hours in agriculture.

REQUIREMENTS TO SATISFY MINORS (minimum of 45 hr)*:
Students in the Agroecology curriculum must complete all requirements for the soil science minor and two other minors offered by the Division of Plant & Soil Sciences:
- **Environmental Microbiology**
- **Environmental Protection**
- **Horticulture**
- **Pest Management**

(See next page for details of requirements for each of the minors).
***Please note that some courses appear within more than one minor; however a course can satisfy the requirements of only one minor (i.e., a single course cannot satisfy requirements for multiple minors). Therefore, a total of 45 credit hours (15 in each minor) representing DIFFERENT courses must be completed.**

CAPSTONE COURSES:
Must complete the capstone course in the soil science minor and one other capstone course that satisfies the requirements in one of the two elective MINORS.
_____ ( ) _____
_____ ( ) _____

WRITING REQUIREMENT
"W " designated course _____ _____

TOTAL CREDIT HOURS (128)

MINORS

Students must complete all requirements for the soil science minor and for two of the other MINORS (minimum of 15 credit hours for each of the minors). Since several courses satisfy requirements for more than one minor, a minimum of 45 credit hours representing DIFFERENT courses in the three minors must be completed (i.e., a single course cannot satisfy requirements for multiple minors).

ENVIRONMENTAL MICROBIOLOGY MINOR:

Required Courses (8 hr):

ENVM 341	(4)	
PPTH 401	(4)	

Additional Credits (7 hr) selected from:

ENVM/ENVP 401 (Capstone)	(4)	
ENVM 408	(3)	
ENVM/AGRN/ENVP 420	(3)	
ENVM 445	(3)	
ENVM 449	(1)	
ENVM 493	(1–3)	
ENVM 495	(1–3)	
PPTH/ENTO 470	(4)	
PPTH 503	(4)	
PPTH 509	(3)	

PEST MANAGEMENT MINOR:

Required Courses (8 hr):

ENTO/ENVP 412 (Capstone)	(4)	
PPTH 401	(4)	

Additional Credits (7 hr) selected from:

ENVP/AGRN 451	(3)	
ENTO 410	(4)	
ENTO/PPTH 470	(4)	
ENTO 493	(1–4)	
PPTH 493	(1-4)	

ENVIRONMENTAL PROTECTION MINOR:

Required Courses (6 hr):

ENVP 155	(3)	
ENVP 460	(3)	

Additional Credits (9 hr) selected from:

ENVP 355	(3)	
ENVP/ENVM 401 (Capstone)	(4)	
ENVP 412/ENTO 412 (Capstone)	(3)	
ENVP 425/AGRN 425 (Capstone)	(3)	
ENVP 451/AGRN 451	(3)	
ENVP 455/AGRN 455	(3)	

HORTICULTURE MINOR:

Required Courses (7 hr):

PL SC 206	(4)	
HORT 220	(3)	

Additional Credits (9 hr) selected from:

HORT 420	(3)	
HORT 441	(3)	
HORT 444	(3)	
HORT 445 (Capstone)	(3)	

SOIL SCIENCE MINOR:

Required Courses (7 hr):

AGRN 202	(3)	
AGRN 203	(1)	
AGRN/ENVP 425 (Capstone)	(3)	

Additional Credits (8 hr) selected from:

AGRN 125	(1)	
AGRN 410	(3)	
AGRN 415	(3)	
AGRN 417	(4)	
AGRN/ENVM/ENVP 420	(3)	
AGRN 430	(3)	
AGRN/ENVP 455	(3)	

Proposal for an Applied and Environmental Microbiology Major Under the Bachelor of Science Degree in the Plant and Soil Sciences Degree Program

The Division of Plant and Soil Sciences proposes the creation of a new major in Applied and Environmental Microbiology under the existing Bachelor of Science Degree in the Plant and Soil Sciences Degree Program. The Division has for many years offered graduate study in environmental microbiology, but has never had an undergraduate major in this area. This has been the norm at most land grant institutions. However, over the past several years there has been an increased interest and need for specialization in applied and environmental microbiology at the undergraduate level.

Overview of the Proposed Major

Divisional faculty have microbiological expertise in relation to bacteria, fungi, and nematodes as applied to water quality, plant disease, environmental remediation, crop production, food sciences and other related topics. It is generally recognized that all students in the biological sciences need exposure to microbiology.

There are significant opportunities for microbiologists today in such areas as food processing, environmental remediation, industrial processes, energy production, sanitation and others. During the fall semester 2005, 70 students in introductory microbiology, ENVM 341, were asked if they would be or might have been interested in a major or career in microbiology had they known early in that career about the major and about one in three indicated yes. In the last year over a dozen students have completed or are working toward the environmental microbiology minor. The American Society for Microbiology publishes a journal titled Applied and Environmental Microbiology. The Division faculty believe there is significant merit to offering a major in this area at this time. The proposed major does not require new courses, faculty or facilities. It is essentially a new combination of existing courses that allows for a concentration in the area of applied and environmental microbiology.

There are no similar degrees being offered by any other institutions in the state. It is envisioned that this major will attract 10-15 students per year in its infancy and grow to an enrollment of 20-25 per year. The program will also provide another mechanism for entry into professional schools for students who take specific biology courses as their electives. This major does not overlap with existing majors or require courses other than GEC courses from other units in the University.

Details of the Proposed Major

The proposed major in Applied and Environmental Microbiology would involve the standard GEC requirements with the stipulation that GEC obj #2 would include CHEM 115/116, MATH 150 and STAT 211. The major would require 43 hrs. of required courses and 18 hrs. in restrictive electives. ENVM 401, environmental microbiology, would serve as the capstone course. The major would require 128 total hrs. and have a B.S. designation. There would be a total of 22 hrs. of free electives. Most of the courses required for this major beyond the GEC requirement are offered in the Davis College at this time. No new courses or facilities are envisioned. Details of course requirements are provided in Exhibit B.

Exhibit B

B.S DEGREE
PLANT AND SOIL SCIENCE PROGRAM
APPLIED AND ENVIRONMENTAL MICROBIOLOGY MAJOR
DIVISION OF PLANT AND SOIL SCIENCES
DAVIS COLLEGE OF AGRICULTURE, FORESTRY & CONSUMER SCIENCES

NAME _____ DATE ENROLLED IN HIGHER EDUCATION _____
STUDENT NUMBER _____ ANTICIPATED GRADUATION DATE _____

	Hrs	Grade
Communication (GEC Obj. #1) (6 hr)		
ENGL 101	3	_____
ENGL 102	3	_____
Basic Math and Science (Includes GEC Obj. #2) (14 hr)		
CHEM 115	4	_____
CHEM 116	4	_____
MATH 150	3	_____
STAT 211	3	_____
The Past and Its Traditions (GEC Obj. #3)		
Elective _____	3	_____
Contemporary Society (GEC Obj. #4)		
Elective _____	3	_____
Artistic Expression (GEC Obj. #5)		
Elective_____	3	_____
The Individual in Society (GEC Obj. #6)		
AGRL 111	1	_____
Elective _____	3	_____
American Culture (GEC Obj. #7)		
Elective _____	3	_____
Western Culture (GEC Obj. #8)		
Elective _____	3	_____
Non-Western Culture (GEC Obj. #9)		
Elective _____	3	_____

(Subtotal of 42 GEC hrs)

REQUIRED COURSES FOR MAJOR (43 hr)

AGBI 410	_____	(3) _____
AGRN 202	_____	(3) _____
AGRN 203	_____	(1) _____
CHEM 233/235	_____	(4) _____
CHEM 234/236	_____	(4) _____
ENVM 341	_____	(4) _____
ENVM 401	(Capstone course) _____	(4) _____
GEN 371	_____	(4) _____
PHYS 101	_____	(4) _____
PHYS 102	_____	(4) _____
PLSC 206	_____	(4) _____
PPTH 401	_____	(4) _____

RESTRICTED ELECTIVES FOR MAJOR (minimum of 18 hr)

AGBI 514	_____	(3) _____
BIOL 312	_____	(3) _____
ENVM 408	_____	(3) _____
ENVM 420	_____	(3) _____
ENVM 445	_____	(3) _____
ENVM 449	_____	(1) _____
ENVM 495	_____	(2) _____
ENVP 355	_____	(3) _____
ENVP 460	_____	(3) _____
PPTH 470	_____	(4) _____
PPTH 503	_____	(4) _____
PPTH 509	_____	(3) _____

WRITING REQUIREMENT
"W " designated course _____ (3) _____

FREE ELECTIVES (22 hrs)
Note: Students intending to apply to pre-professional programs are advised to take BIOL 115, 117, 219, and 310 as a portion of their FREE ELECTIVE courses

_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____
_____( ) _____

TOTAL HOURS 128

Proposal for a Soil Sciences Major Under the Bachelor of Science Degree in the Plant and Soil Sciences Degree Program

The Division of Plant and Soil Sciences proposes that a major in soil sciences be established under the existing Bachelor of Science Degree in the Plant and Soil Sciences Degree Program. The Division currently has a major in agronomy with an emphasis in soil sciences. It is requested that a major in soil sciences be established to more accurately reflect the offerings in soil sciences at WVU and to emphasize this discipline which is one where both an increase in student numbers and expertise of graduates can be achieved.

The objective of the major is to have a high quality program that provides students the courses and educational experiences that result in graduates being able to become ARCPACS certified soil scientists by the American Society of Agronomy and who are able to address current problems in soil sciences from a scientific viewpoint. The proposed major would require no new courses, faculty or facilities.

Overview of the Proposed Major

The proposed major would have a B.S. designation whereas the current emphasis in soil sciences under the agronomy program has a B.S. in agriculture designation. This change is being made because the focus of the proposed soil sciences program is in land use and management, not agriculture production. Thus the requirement for 45 hrs. in agriculture has been dropped and replaced with an increase in course hours more relevant to the new focus areas.

The USDA Natural Resources Conservation Service, a major employer of soil sciences majors, and other employers of soil scientists are seeking graduates with more chemistry, math and other basic science skills. Past graduates did not necessarily qualify to be certified soil scientists. The proposed curriculum will correct this situation.

There are no other schools in the state which offer this degree. It is anticipated that with this new major the number of students will remain static over the next few years but then increase to 10-15 per year as more graduates are placed in the area of land use planning and/or watershed management. The WVU and Divisional affiliated USDA-NRCS National Geospatial Development Center which concentrates on these topics has potential to enhance the visibility of this major as well.

Details of the Proposed Major

The proposed curriculum for the major requires specific courses in GEC object #2 and 37/38 hrs. of required courses. An additional 15 hrs. of soil science must be taken from a list of restrictive electives in Agronomy, all of which are soil sciences courses. Students must then choose to emphasize either land use or watershed management in their curriculum by taking a capstone course and 9 additional hours from one of the emphasis areas. The proposed major requires 128 hrs. and includes 10 hrs. of free electives. Exhibit C provides a complete list of the courses proposed for the major.

Exhibit C

B.S. DEGREE
PLANT AND SOIL SCIENCE PROGRAM
SOIL SCIENCE MAJOR
DAVIS COLLEGE OF AGRICULTURE, FORESTRY & CONSUMER SCIENCES
DIVISION OF PLANT AND SOIL SCIENCES

NAME _____ **DATE ENROLLED IN HIGHER EDUCATION** _____
STUDENT NUMBER _____ **ANTICIPATED GRADUATION DATE** _____

	Hrs.	Grade
Communication (GEC Obj. #1) (9 Hrs.)		
ENGL 101	3	_____
ENGL 102	3	_____
ENGL 305	3	_____
Basic Math and Science (Includes GEC Obj. #2) (22 Hrs.)		
CHEM 115	4	_____
CHEM 116	4	_____
CHEM 231	4	_____
GEOL 110 and GEOL 111	3/1	_____
MATH 150	3	_____
STAT 211	3	_____
The Past and Its Traditions (GEC Obj. #3)		
Elective _____	3	_____
Contemporary Society (GEC Obj. #4)		
ENVP 155 _____	3	_____
Artistic Expression (GEC Obj. #5)		
Elective _____	3	_____
The Individual in Society (GEC Obj. #6)		
AGRL 111 _____	1	_____
AGEE 220 _____	3	_____
American Culture (GEC Obj. #7)		
Elective _____	3	_____
Western Culture (GEC Obj. #8)		
ECON 201 _____	3	_____
Non-Western Culture (GEC # 9)		
Elective _____	3	_____

GEC Total 43 Hrs.

Required Courses for Major (37-38 Hrs.)

AGRN 202, 203 _____ **(4)** _____
CS 101 or AGEE 110 _____ **(4/3)** _____
ENVM 341 _____ **(4)** _____
PLSC 206 _____ **(4)** _____
PHYS 101 _____ **(4)** _____
PHYS 102 _____ **(4)** _____
SPA 170 _____ **(3)** _____
SPA 270 _____ **(3)** _____

Must choose two of the following three courses

ENTO 404 _____ **(4)** _____
GEN 371 _____ **(4)** _____
PPTH 401 _____ **(4)** _____

Restricted Electives for Major (15 Hrs.)

AGRN 125 _____ **(3)** _____
AGRN 410 _____ **(1)** _____
AGRN 415 _____ **(3)** _____
AGRN 417 _____ **(4)** _____
AGRN 420 _____ **(3)** _____
AGRN 430 _____ **(3)** _____
AGRN 455 _____ **(3)** _____

EMPHASIS

12 Hours from one of the following including capstone

LAND USE

AGRN 425 Capstone _____ **(3)** _____
CE 200 _____ **(3)** _____
CE 351 _____ **(3)** _____
CE 441 _____ **(3)** _____
GEOL 201 _____ **(3)** _____
GEOL 321 _____ **(3)** _____
RESM 493 _____ **(3)** _____

WATERSHED MANAGEMENT

AGRN 425 Capstone _____ **(3)** _____
BIOL 361 _____ **(4)** _____
CE 347 _____ **(3)** _____
ENVP 355 _____ **(3)** _____
ENVP 460 _____ **(3)** _____
GEOL 321 _____ **(3)** _____
GEOL 463 _____ **(3)** _____
WMN 446 _____ **(3)** _____

FREE ELECTIVES (10 Hrs.)

_____ ( ) _____
_____ ( ) _____
_____ ( ) _____
_____ ( ) _____

Total Credits 128

Proposal for a Change in the
Horticulture Major Curriculum
Under the Bachelor of Science in Agriculture Degree in the
Plant and Soil Sciences Degree Program

The Division of Plant and Soil Sciences is requesting a change in the curriculum for the Horticulture Major. The changes proposed decrease the chemistry requirement from CHEM 115/116 and organic to CHEM 111/112, increase the requirement in horticulture from 12 to 21 hrs., and establish two programmatic areas of emphasis. These proposed changes reflect new faculty expertise in the horticulture program and are in keeping with current student interest and employment opportunities.

Horticulture in WV and the region is a rapidly growing industry which is projected to continue to increase in importance. The nature of horticulture has changed as the area becomes more urban. The focus of the horticulture program at WVU is in the areas of landscape management and production of nursery/greenhouse plants. These horticulture activities are directed toward meeting aesthetic needs in a growing urban environment. Potential employers and students desire more emphasis on the applied aspect of horticulture with less emphasis on traditional vegetable/fruit production.

It is the view of the faculty that our students and the industry would be better served by implementing the changes proposed. The required level of chemistry has been decreased because it is not necessary to have the more advanced chemistry for the objectives of the program. More horticulture requirements have been added to better prepare students for the breadth of horticulture issues associated with evolving aesthetic horticulture. The areas of emphasis have been added to give students the opportunity to specialize in their studies based on their interests.

The changes proposed do not require any new financial resources, faculty or facilities. Two course alterations are planned which are changes that will be proposed even if the curriculum requirements do not change. Current courses in vegetables, small fruits and tree fruits will be combined into a single course and a course in landscape installation and maintenance will be proposed. This latter course is currently taught as special topics. The proposed new curriculum appears in Exhibit D.

Exhibit D

B.S. IN AGRICULTURE
PLANT AND SOIL SCIENCES CURRICULUM
HORTICULTURE MAJOR
DIVISION OF PLANT AND SOIL SCIENCES
DAVIS COLLEGE OF AGRICULTURE, FORESTRY, AND CONSUMER SCIENCES
WEST VIRGINIA UNIVERSITY

NAME _____ **DATE ENROLLED IN HIGHER EDUCATION** _____
STUDENT NUMBER _____ **ANTICIPATED GRADUATION DATE**_____

Hours Grade

Communication (Includes GEC Obj. #1) (6 hrs)
ENGL 101 _____ **3** _____
ENGL 102 _____ **3** _____

Basic Math and Science (Includes GEC Obj. #2) (17 hrs)
CHEM 111 (4) _____ **CHEM 112 (4)** _____
BIOL 350 (3) _____ **MATH 126 (3)** _____
CS 101 (3) _____

The Past and Its Traditions (GEC Obj. #3)
Elective _____ **(3)** _____

Contemporary Society (GEC Obj. #4)
Elective PLSC 105_____ **(3)** _____

Artistic Expression (GEC Obj. #5)
Elective _____**3)** _____

The Individual in Society (GEC Obj. #6)
AGRL 111 _____ **(1)** _____
Elective _____ **(3)** _____

American Culture (GEC Obj. #7)
Elective_____**(3)** _____

Western Culture (GEC Obj. #8)
Elective _____**(3)** _____

Non-Western Culture (GEC Obj. #9)
Elective _____**(3)** _____

REQUIRED AGRICULTURE COURSES (30hrs)

A&VS 251 _____ **(4)** _____
AGRN 202/203 _____ **(4)** _____
AGRN 410 _____ **(3)** _____
ARE 150* _____ **(3)** _____
ENTO 404 _____ **(4)** _____
PPTH 401 _____ **(4)** _____
PLSC 206 _____ **(4)** _____
GEN 371 or ENVM 341 _____ **(4)** _____

REQUIRED HORTICULTURE COURSES (15 hrs)
HORT 220 _____ **(3)** _____
HORT 420 _____ **(3)** _____
HORT 441 _____ **(3)** _____
HORT 491 or H0RT 493 _____ **(3)** _____
HORT 445 (Capstone) _____ **(3)** _____

WRITING COURSE (3 hrs.) _____

AREAS OF EMPHASES (15 hrs) See Page 2

Free Electives (14 hrs.)

_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____
_____ _____

Total 128

*** If ECON 201 is taken an ARE course other than ARE 150 may be substituted.**

HORTICULTURE EMPHASES

LANDSCAPE MANAGEMENT

Required Courses (9hrs)

LARC 105	_____	**(3)**	_____
HORT 260	_____	**(3)**	_____
HORT 493	_____	**(3)**	_____

Restricted Electives (6 hrs)

AGEE 452	_____	**(3)**	_____
AGRN 315	_____	**(3)**	_____
AGRN 451	_____	**(3)**	_____
ARE 204	_____	**(3)**	_____
BIOL 361	_____	**(4)**	_____
ENTO 412	_____	**(4)**	_____
CE 200	_____	**(3)**	_____
HORT 262	_____	**(3)**	_____

PRODUCTION

Required Courses (9hrs)

AGRN 451	_____	**(3)**	_____
HORT 444	_____	**(3)**	_____
HORT 493	_____	**(3)**	_____

Restricted Electives (6hrs)

AGEE 452	_____	**(3)**	_____
AGRN 315	_____	**(3)**	_____
ARE 204	_____	**(3)**	_____
BIOL 352	_____	**(3)**	_____
ENTO 412	_____	**(3)**	_____
HORT 230	_____	**(3)**	_____
HORT 262	_____	**(3)**	_____
PLSC 453	_____	**(3)**	_____

Proposal for a Change in the
Agronomy Major Curriculum
Under the Bachelor of Science in Agriculture Degree in the
Plant and Soil Sciences Degree Program

The current agronomy major has emphasis areas of soil science and crop science. The faculty of the Division of Plant and Soil Sciences proposes that the soil science emphasis be converted to a new major which will be presented in a separate request. The crop emphasis would remain the same in content but would no longer be an emphasis area, but rather the primary content of the agronomy major. It is further proposed that a turf emphasis be added to accommodate those students interested in turf grass management. The faculty believes the proposed changes will more clearly identify both the soil and crop science aspects of agronomy and attract students who may be interested in turf grass management. The turf emphasis would require an internship in turf grass management. Further details of the proposed curriculum appear in Exhibit F.

Exhibit F

B.S. IN AGRICULTURE DEGREE
PLANT AND SOIL SCIENCE PROGRAM
AGRONOMY MAJOR
DIVISION OF PLANT AND SOIL SCIENCES
DAVIS COLLEGE OF AGRICULTURE, FORESTRY, AND CONSUMER SCIENCES

NAME _____ **DATE ENROLLED IN HIGHER EDUCATION** _____
STUDENT NUMBER _____ **ANTICIPATED GRADUATION DATE** _____

		Hrs.	Grade
Communication (Includes GEC Obj. #1 requirements)			
(9 hr)	**ENGL 101**	**3**	_____
	ENGL 102	**3**	_____
	ENGL 305 (w)	**3**	_____
Basic Math and Science (Includes GEC Obj. #2 requirements)			
(28 or 29 hrs)	**BIOL 350**	**3**	_____
	CHEM 115	**4**	_____
	CHEM 116	**4**	_____
	CHEM 231	**4**	_____
	CS 101 or		
	AGEE 110	**4/3**	_____
	MATH 128	**3**	_____
	PHYS 101	**4**	_____
	STAT 211	**3**	_____
The Past and Its Traditions (GEC Obj. #3)			
Elective _____		**3**	_____
Contemporary Society (GEC Obj. #4)			
Elective _____		**3**	_____
Artistic Expression (GEC Obj. #5)			
Elective _____		**3**	_____
The Individual in Society (GEC Obj. #6)			
AGRL 111		**1**	_____
Elective _____		**3**	_____
American Culture (GEC Obj. #7)			
Elective _____		**3**	_____
Western Culture (GEC Obj. #8)			
Elective _____		**3**	_____
Non-Western Culture (GEC Obj. #9)			
Elective _____		**3**	_____

REQUIRED AGRICULTURAL COURSES
(Required and elective courses must include 45 hours in agr.)

AGRN 202 _____ **(3)** _____
AGRN 203 _____ **(1)** _____
AGRN 452 _____ **(3)** _____ **Capstone**
AGRN 454 _____ **(3)** _____
A&VS 251 _____ **(4)** _____
ARE ELECTIVE (3) _____
ENTO 404 _____ **(4)** _____
ENVM 341 _____ **(4)** _____
GEN 371 _____ **(4)** _____
PPTH 401 _____ **(4)** _____
PLSC 206 _____ **(4)** _____

CROP SCIENCE ELECTIVES (9 Hrs.) Required

_____ **( )** _____
_____ **( )** _____
_____ **( )** _____
_____ **( )** _____

SOIL SCIENCE ELECTIVE 2Hrs

_____ **( )** _____

ECON/ARE ELECTIVE 3 Hrs.

_____ **( )** _____

COMM OR SPA ELECTIVE 3 Hrs.

_____ **( )** _____

FREE ELECTIVES 13-14 Hrs.

_____ **( )** _____
_____ **( )** _____
_____ **( )** _____
_____ **( )** _____
_____ **( )** _____

TURF EMPHASIS (12hrs.)
(Students wanting to emphasize turf should take the following courses as crop science and free electives.

AGRN 315 _____ **(3)** _____
AGRN 451 _____ **(3)** _____
AGRN 410 _____ **(3)** _____
AGRL 491 _____ **(3)** _____

TOTAL CREDITS 128

Proposal to Delete the
Environmental Protection Curriculum
Under the Bachelor of Science Degree in the
Plant and Soil Sciences Degree Program

The current environmental protection major has curricula for two degree designations: a B.S. and a B.S. Agriculture. The faculty in Plant and Soil Sciences proposes that the curriculum under the B.S. designation be dropped and that the curriculum under the B.S. Agr. designation remain unchanged. Most students in the program choose the B.S. Agr. curriculum. The expertise of faculty is better suited to this curriculum than the broader B.S. curriculum. Those wishing for a B.S. designation would be better served by taking one of the other B.S. curricula proposed by the Division. This proposed change would have no impact on current students and would not require any additional resources.

Proposal for a Minor in Equine Management

Davis College of Agriculture, Forestry and Consumer Sciences
West Virginia University

Justification: Discussions regarding the feasibility for the Division of Animal and Veterinary Sciences to establish an academic program focused on equine began over a decade ago. The basis of these discussions was the perception that student interest would be high and this would enhance our student numbers and credit hours generated within the Division and College. In addition, there is evidence of significant growth in the equine industry within the State. As an example, equine projects were the number one project focus of 4-H. Thus, any focus of the College in equine science would enhance our opportunities to provide educational programs and garner support from this industry. In 2002, the Davis College of AFCS approved a feasibility study to assess the level of interest of students in equine science, the level of equine industry and alumni/community support, faculty, staff, livestock and facility needs for implementation of an equine program and start-up and operational cost and self-supporting earning potential of such a program. From this study, the recommendation was that WVU should introduce an equine science program initiated in four phases to ensure that the program be tailored to student and industry needs. As a result of this study, a request to the WV Legislature was made for support of a joint (Davis College & Extension) faculty position to facilitate setting up an equine program. Although the funds for this position were never received, the Joint Committee on Economic Development approved funding ($50K) to conduct an economic impact study of the equine industry in West Virginia. This study was conducted and the final report was submitted in 2005. Results for this study, revealed a significant economic impact ($509 M) of the equine industry on the West Virginia economy. The recommendations were that state government should take the lead to develop partnerships with the industry and West Virginia University to enhance the contribution of the equine industry to the state economy and fund an equine specialist position at WVU.

In 2003, WVU and the Davis College of AFCS accepted a gift of 20 horses from Mr. Bob Evans. Associated with this gift, the College proposed to offer a minor in equine management phased in over a 3-year period (yr-1, design facilities and strategies for personnel support; yr-2, complete construction of facilities, secure personnel, develop and advertise proposed curriculum; yr-3, initiate program and officially accept students for the minor. The proposed minor in Equine Management will be offered to students of all majors within West Virginia University. The minor is designed for students who wish to advance their knowledge of equine management practices or wish to find employment within the equine industry. Students will gain knowledge of equine management related to reproduction, nutrition, health, training methods and design of facilities and economy of the industry.

Catalog Description

Completion of a minor in Equine Management will require 16 credit hours of course work.

Curriculum

Required Courses:

Animal Nutrition (ANNU 260)	3 credit hours
Equine Management & Training (A&VS 281)	3 credit hours
Facility Design & Management (RESM 330)	3 credit hours
Light Horse Science (A&VS 344)	3 credit hours
Rural Enterprise Development (ARE 421)	4 credit hours

Resources

We received in conjunction with the gift of horses from Mr. Evans a cash gift of $75K to initiate the construction of facilities. These funds could be used against the cost of construction of a stall barn facility at the Morgantown Livestock Farm Unit. Horses are available for use in this program. Three (ANNU 260, ANPR 344, and ARE 421) of the five courses proposed in the minor are currently being taught with acceptable enrollment. The two additional courses (A&VS 281, and RESM 330) have been developed and taught as special topic courses and are being submitted for approval as new courses. Jennifer Lewis-Poling has been hired as an instructor and is the instructor for A&VS 281, 344 and RESM 330. In addition, effort would continue to seek support from the WV Legislature for an additional joint faculty position between WVU Extension and the Davis College of Agriculture, Forestry and Consumer Sciences.

Memorandum

To: Faculty Senate Executive Committee

From: Lesley Cottrell, Chair-Elect
Senate Curriculum Committee

Date: October 16, 2006

Re: Administrative Changes

The following alterations (minor changes) have received administrative approval:

ALTERATIONS (Minor Changes):

Subject Code	Course Code	CIP	Alteration Request	Reason for Change	Effective Date
Prefix Change to AFCS			**Action:** Request to change all courses with the current AG & F prefix (Agriculture and Forestry) to AFCS (Agriculture, Forestry & Consumer Sciences).	**Rationale:** The Division of Family and Consumer Sciences rejoined the College in 1987. Since the courses under this prefix are available on a college-wide basis to all students, the prefix should have been changed at that time.	200608

Course Alterations:

ARE	**601**	010103	**Action:** Course number change **Old:** 500. Applied Microeconomics. I. 3 hr. PR: Econ 301 and 421, or equiv. Producer and consumer economics used in resource, environmental, and agricultural analysis. **New:** 601. Applied Microeconomics. I. 3 hr. PR: Econ 301 and 421, or equiv. Producer and consumer economics used in resource, environmental, and agricultural analysis.	**Rationale:** Course number consistent with intended audience	200608
ARE	**602**	010103	**Action:** Course number change; dropped pre-requisite. **Old:** 530. Production Economics. II. 3 Hr. PR; ARE 500 and ARE 521. Developments in producer economics applied to natural resources, environmental, and agricultural issues. **New:** 602. Production Economics. II. 3 Hr. PR: ARE 601. Developments in producer economics applied to natural resources, environmental, and agricultural issues.	**Rationale:** Course number change consistent with intended audience; set course number allowing sequential coverage of material with ARE 601; 521 dropped as pre-requisite.	200701
ARE	**621**	010103	**Action:** Course number and pre-requisite change. **Old:** 521. Quantitative Methods in Resource Economics. I. 3 Hr. PR: ECON 421 or equivalent. Optimization techniques in economic analysis of natural resources; environmental and agricultural management problems; linear, nonlinear, and dynamic programming. **New:** 621. Quantitative Methods in Resource Economics. I. 3 Hr. PR: ARE 601 and ECON 421 or equivalents. Optimization techniques in economic analysis of natural resources; environmental and agricultural management problems; linear, nonlinear, and dynamic programming.	**Rationale:** Course changes consistent with intended audience	200608

ARE	**624**	010103	**Action:** Course number change **Old:** 524. Econometric Methods in Resource Economics. I. 3 hr. PR: ECON 425.Application methods to natural resource, environmental, and agricultural economic problems; single and simultaneous equation models, specification problems, topics in time series, and cross-sectional analysis. **New:** 624. Econometric Methods in Resource Economics. I. 3 hr. PR: ECON 425.Application methods to natural resource, environmental, and agricultural economic problems; single and simultaneous equation models, specification problems, topics in time series, and cross-sectional analysis.	**Rationale:** Course number change reflects intended audience for the course.	200608
ARE	**643**	010103	**Action:** Request to include the lab as part of the course. **Old:** 543. Project Analysis and Evaluation II. 3 Hr. Design, analysis, and evaluation of development projects; economic and financial aspects of project analysis; risk analysis; preparation of feasibility reports. **New:** 643. Project Analysis and Evaluation. II. 4 Hr. Analysis, and evaluation of investment projects; economic and financial aspects of project analysis; risk analysis; preparation of feasibility reports.	**Rationale:** Independent listing and scheduling of the course and the lab causes a considerable amount of confusion and scheduling problems every semester.	200701
BIOL	**124**	260101	**Action:** MDS courses are to be moved into appropriate majors' units. **Old:** An examination of some of the facets of the environmental deterioration and corrective public policies. An interdisciplinary, non-prerequisite course for all students in the University. **New**: The Human Environment. 3-Hr. An examination of several aspects of current worldwide environmental deterioration caused by the actions of humans. Public policies and alternative mitigative strategies are also presented.	**Rationale:** MDS courses are to be moved into appropriate majors' units. "The Human Environment" covers many biological and ecological aspects of the Earth. These topical areas are integral components of the Department of Biology curriculum. Currently, MDS 124 fulfills the GEC objective 2c and LSP cluster c requirement. BIOL 124 will fulfill the same objective and cluster group since the course content remains the same.	200701

CE	**462**	140801	**Action:** Pre-requisite change. **Old:** 462. Reinforced Concrete Design. 3 Hr. PR: CE 310 and CE 361. Behavior and design of reinforced concrete members. Material properties, design methods and safety consideration, flexure, shear, bond, and anchorage, combined flexure and axial load, footings, introduction to torsion slender columns and pre-stressed concrete. **New:** 462. Reinforced Concrete Design. 3 Hr. PR: CE 361. Behavior and design of reinforced concrete members. Material properties, design methods and safety consideration, flexure, shear, bond and anchorage, combined flexure and axial load, footings, introduction to torsion slender columns and pre-stressed concrete.	**Rationale:** The earlier pedagogy was to have everyone take a background course in civil engineering materials, but under the new curriculum the required design courses can be selected from specialty tracks, including structures, transportation, and environmental, and geotechnical courses.	200608
CE	**463**	140801	**Action:** Pre-requisite change. **Old:** 463. Steel Design, 3 Hr. PR: CE 361 and CE 310. Design of steel bridge and building systems with emphasis on connections, beams, columns, plastic design, and cost estimates. **New:** 463. Steel Design, 3 Hr. PR: CE 361. Material properties, design of steel bridge and building systems with emphasis on connections, beams, columns, plastic design, and cost estimates.	**Rationale:** See rationale above.	200608
CE	**464**	140801	**Action:** Prerequisite change. **Old:** 464. Timber Design. 3 Hr. PR: CE 361 and 310. Fundamentals of modern timber design and analysis. Topics include wood properties, design of beams, columns, trusses, and pole structures using dimension lumber, glue-laminated products, and plywood. **New:** 464. Timber Design. 3 Hr. PR: CE 361. Fundamentals of modern timber design and analysis. Topics include wood properties, design of beams, columns, trusses, and other structures using dimension lumber, glued-laminated products and composites.	**Rationale:** See rationale above.	200608

CS	**221**	110701	**Action:** Correction of previous omission of CS 111 as pre-requisite **Old:** Analysis of Algorithms. 3 Hr. PR: CS220 and MATH 156. Introduction to algorithm design and analysis. Growth rate of functions and asymptotic notation. Divide-and-conquer algorithms and recurrences; searching and sorting; graph algorithms including graph searching, minimum spanning trees, and shortest paths. **New:** Analysis of Algorithms. 3 Hr. PR: CS 111 and CS 220 and MATH 156. Introduction to algorithm design and analysis. Growth rate of functions and asymptotic notation. Divide-and-conquer algorithms and recurrences; searching and sorting; graph algorithms including graph searching, minimum spanning trees, and shortest paths.	**Rationale:** Correction of omission	200701
DENT	**758**	510401	**Action:** Course presentation format modified from 2-hr classroom lecture to 6-7 presentations over two semesters; combination of content from DENT 764 and 762 **Old:** 758. Operative Dentistry. 2 Hr. More complex and advanced techniques for clinical practice with emphasis on new developments throughout the scope of operative dentistry. **New:** 758. Senior Seminar. 2 Hr. More complex and advanced techniques for clinical practice in all disciplines in dentistry with emphasis on new developments in oral surgery and endodontics.	**Rationale:** Presentation format changes to ensure that students on rural rotation are able to attend course	200608

IH&S	**725**	Not listed	**Action:** Corrected prefix change and "or Consent" substitution. **Old:** Industrial Hygiene Sampling and Analysis. 4 Hr. PR: IMSE 561 and Consent. Calibration and use of sampling and analytical equipment used by industrial hygienists to evaluate the work environment. Advantages and disadvantages of different equipment under various conditions. Biological monitoring as an evaluation tool. **New:** Industrial Hygiene Sampling and Analysis. 4 Hr. PR: IENG 561 or Consent. Calibration and use of sampling and analytical equipment used by industrial hygienists to evaluate the work environment. Advantages and disadvantages of different equipment under various conditions. Biological monitoring as an evaluation tool.	**Rationale:** Corrected IMSE 561 prefix needed	200605
MUSC	**500-500Z**	**Not included**	**Action:** Changing course from a fixed one credit course to variable 1-2 credits. **Old:** MUSC 500-500Z. 1HR. Group or individual instruction on applied instrument, with emphasis on methods and materials for school music teachers. **New:** MUSC 500-500Z. Variable 1-2 HR. Group or individual instruction on applied instrument, with emphasis on methods and materials for school music teachers.	**Rationale:** Graduate students in music education, who often seek to develop skill on a secondary instrument/voice, must be able to register for secondary performance: bassoon for 2 credits in order to meet their curricular requirements in a timely fashion.	200701
PHYS	**101**	Not provided	**Action**: Addition of pre-requisites **Old** **New** Pre-requisite courses: Math 126 or Math 128, 129, 150, 155, 156 Co-requisite courses: Math 128 or 129, 150, 155, 156	Banner system pre-requisite checking requires all "higher" level math classes to also be listed as possible pre-requisites to function properly, i.e., a student in Math 155 without Math 128 should still be able to take Physics 101.	200608

PLSC	**206**	Not listed	**Action:** Specified pre-requisites for course no longer required (BIOL 101 and 103). **Old:** 206. Principles of Plant Science. I. II. 4 Hr. PR: BIOL 101 and BIOL 103. Basics of the nature, history, classification, role, distinction, structure and function, reproduction, improvement, culture, pests, storage handling, production and marketing and utilization of agricultural plants. **New:** 206. Principles of Plant Science. I. II. 4 hr. Anatomy, morphology, and physiology of higher plants. Study of growth and development of economically important plants, their culture, and products.	**Rationale:** Course content incorporates more materials on whole plant botany and physiology which is required by majors in plant and soil sciences.	200608
SPA	**484**	510204	**Action**: Course being altered from 1 credit hour to 2 credits. **Old:** Clinical Study & Application 1. 1 hr. PR: All required courses through junior year. SPA seniors will meet in weekly seminars and with a faculty mentor to explore, develop, and write a clinically-oriented research paper and corresponding annotated bibliography that contains a minimum of twenty relevant sources. **New:** Clinical Study & Application 1. 2 hr. PR: All required SPA courses through junior year. SPA seniors will meet in weekly seminars and with a faculty mentor to explore, develop, and write a clinically-oriented 10-15 page research paper with a minimum of twenty-five relevant resources cited.	**Rationale:** The course is being altered due to the amount of in-class and out-of-class work that is necessary to complete the requirements of the course. This course is the first in a series of capstone course experiences in the department. Furthermore, adding 1 hour of credit will allow for expansion of the research process and allow the students to receive more feedback in class.	200608
UNIV	**101**	Not listed	**Action:** Admission criteria for the Regents degree will be used to define non-traditional students. These students will be exempt from this graduation requirement	**Rationale:** University 101 is used as the common freshman course, which assist first-year students in making a successful transition from high school to college. It is felt that this course is not appropriate nor is it necessary for non-traditional students entering WVU.	200608

USAF	**131**	290101	**Action**: Update course title and description. **Old** 131. The Air Force Today 1. 2 HR. The air force in the contemporary world through a study of the total force structure, strategic offensive and defensive forces, general purpose forces, aerospace support forces, and separate operating agencies. (Also includes leadership laboratory). **New** 131. Foundations of US Air Force 1. 1HR. COREQ: USAF 100. Survey course designed to introduce students to the United States Air Force. Provides an overview of the basic characteristics, missions, and organization of the Air Force. Includes an overview of AFROTC and AFROTC special programs.	**Rationale:** Modification of course title and description completed to more closely match the title and description as listed in the current Air Force Officer Accession Training Schools (AFOATS) curriculum catalog. AFOATS is the governing body and curriculum source for AFROTC programs nationwide.	200608
USAF	**132**	290101	**Action**: Change in course title and description. **Old** 132. The Air Force Today 2. 2hr. Continuation of USAF 131. **New** 132. Foundations of US Air Force 2. 1 HR. COREQ: USAF 100. Continuation of USAF 131.	Please see above rationale.	200701
USAF	**251**	290101	**Action**: Change in course title and description. **Old:** 251. The Air Force Way 1. 2 hr. The development of air power from dirigibles and balloons through the peaceful employment of US air power in relief missions and civic actions programs in the late 1960's and the air war in Vietnam; leadership and managerial communicative skills are stressed by having students prepare both written and oral presentations (Also includes leadership laboratory). **New: 251.** USAF Air and Space Power 1. 1 HR. COREQ: USAF 100. Student of USAF heritage and leaders with respect to the evolution and employment of air and space power. Analysis of operational examples will emphasize development and application of competencies, functions, and doctrine.	Please see above rationale.	200608

USAF	**252**	290101	**Action**: Change in course title and description. **Old:** 252. The Air Force Way 2. 2 hr. Continuation of USAF 251. **New: 252.** USAF Air and Space Power 2. 1 HR. Continuation of USAF 251.	Modification of course title and description completed to more closely match the title and description as listed in the current Air Force Officer Accession Training Schools (AFOATS) curriculum catalog. AFOATS is the governing body and curriculum source for AFROTC programs nationwide.	200608
USAF	**371**	290101	**Action**: Change in course title and description. **Old:** Air Force Leadership and Management 1. 3 hr. PR: GMC or equiv. (Equivalent credit may be granted by WVU director of Admissions and Records and the professor of Aerospace Studies on the basis of prior military service or ROTC training other than courses in Aerospace Studies and six weeks of field training). Course focuses on leadership, management, and the progressive development of communicative skills needed by junior officers. It emphasizes the individual as a manager in the air force. Individual motivational and behavioral processes, leadership, communication, and group dynamics are covered to provide a foundation for the development of the junior officer's professional skills. Organizational power, politics, and managerial strategy and tactics are discussed within the context of business and military organizations. Students will make field trips, prepare individual and group presentations for class, write reports, and participate in group discussions, seminars, and conferences (Also includes leadership laboratory). **New: 371.** USAF Leadership Studies 1. 3 HR. COREQ: USAF 100. Student of leadership, management, professional knowledge, leadership ethics, and communication skills required of an Air Force junior officer. Case studies are used as a means of exercising practical application of concepts.	Please see above rationale.	200608
USAF	**372**	290101	**Action**: Change in course title and description. **Old: 372**. Air force Leadership and Management 2. 3 hr. PR: USAF 371. Continuation of USAF 371. **New: 372.** USAF Leadership Studies 2. 3 Hr. COREQ: USAF 100. Continuation of USAF 371.	Please see above rationale.	200701

USAF	**481**	290101	**Action**: Change in course title and description. **Old:** 481. Preparation for Active Duty 1. 3 hr. PR: USAF 371 and USAF 372. The course is a study of US national security policy which examines the formulation, organization, and implementation of national security; context of national security; evolution of strategy; management of conflict; and civil-military interaction. It also includes blocks of instruction on the military professional/officership and the military justice system. The course is designed to provide future air force officers with a background of US national security policy so they can effectively function in today's air force. (Also includes leadership laboratory). **New:** 481. Nat'l Security/Active Duty 1. 3 hr. Prerequisite: USAF 100- and USAF 200-level classes or with special permission from Aerospace Studies Department. Examines the national security process, regional studies, leadership ethics, and USAF doctrine. Topics include the military as a profession, officership, military justice, civilian control of the military, active duty preparation, and issues affecting military professionalism.	Modification of course title and description completed to more closely match the title and description as listed in the current Air Force Officer Accession Training Schools (AFOATS) curriculum catalog. AFOATS is the governing body and curriculum source for AFROTC programs nationwide.	200608
USAF	**482**	290101	**Action**: Change in course title, description, and prerequisites. **Old: 482.** Preparation for Active Duty 2. 3 hr. PR: USAF 371 and USAF 372 and USAF 481. Continuation of USAF 481. USAF 131, 132, 251, 252, 371, 372, 481, and 482 may be taken out of sequence, if unusual circumstances warrant and the student has received approval from the professor of Aerospace Studies. **New: 482.** Nat'l Security/ Active Duty 2. 3 Hr. Prerequisite: USAF 100- and USAF 200-level classes or with special permission from Aerospace Studies Department. USAF 131, 132, 251, 252, 371, 372, 481, and 482 may be taken out of sequence if unusual circumstances warrant and the student received approval from the professor of Aerospace Studies.	Please see above rationale.	200701

AGEE 442 131301 **Action: Course Drops**
Old: AGEE 442. Prgm Devlp/Eval-Extensn 3 hr. Planning, implementation and evaluation of programs in rural and community development.

ARE 500 010103
Old: 500. Applied Microeconomics. I. 3 hr. PR: Econ 301 and 421, or equiv. Producer and consumer economics used in resource, environmental, and agricultural analysis.

ARE 521 010103
Old: 521. Quantitative Methods in Resource Economics. I. 3 Hr. PR: ECON 421 or equivalent. Optimization techniques in economic analysis of natural resources; environmental and agricultural management problems; linear, nonlinear, and dynamic programming.

ARE 524 010103.
Action: Course being replaced by ART 624 Economic Methods in Resource Economics.

Old: 524. Econometric Methods in resource Economics. I. 3-Hr. PR: ECON 425. Application methods to natural resource, environmental, and agricultural economic problems; single and simultaneous equation models, specification problems, topics in time series, and cross-sectional analysis.

ARE 530. 010103.
Action: Course being replaced by ART 630 Production Economics.

Old: 530. Production Economics. II. 3-Hr. PR: ARE 500 and ARE 521. Developments in producer economics applied to natural resources, environmental, and agricultural issues.

ARE 543. 010103.
Action: Course being replaced by ARE 643 project Analysis and Evaluation.

Old: 543. Project Analysis and Evaluation. II. 3-Hr. Design, analysis, and evaluation of development projects; economic and financial aspects of project analysis; risk analysis; preparation of feasibility reports.

CEE 536 14
Old: 536. Highway Planning. 3 Hr. PR: Consent. Theory and practice of highway investment decision-making with emphasis on quantitative techniques of traffic assignment and travel demand forecasting, system evaluation, establishing priorities, and programming. Both rural and urban highway systems are considered (3 hr. rec.).

DENT 762 510401
Old: 762. 1 Hr. Endodontics. Lectures on rationale, diagnosis, prevention, and non-surgical and surgical treatment of disease of the dental pulp and their sequelae.

DENT 764 510401
Old: 764. Pain and Anxiety Control. 1 Hr. Consent. Instruction in the psychology, physiology, and clinical techniques of controlling pain and anxiety in the dental patient.

DENT 779 510401
Old: 779. Practice Management – Ethics. 1 Hr. Core knowledge of ethical issues in dentistry; the process of ethical decision making.

LAW 704 220101
Old: 704. Basic elements of consensual relations enforced by law: formation, performance, breach, excuse, remedies, and the impact of modern legislation upon common law principles.

LAW 708 220101
Old: 708. Wills, intestate succession, estate administration, trusts, and future interests.

LAW 371 220101
Old: LAW 371. *Legal History*. 2 Hr. Survey of those personalities and principles which have shaped Anglo-American law and traditions.

LAW 749 220101
Old: LAW 749. 3 Hr. A theoretical and practical examination of negotiation, court-annexed and private mediation and arbitration, summary jury and minitrials, and other "alternative" dispute resolution processes; an assessment of the appropriateness of ADR for particular legal disputes.

LAW 751 220101
Old: LAW 751. *Taxation 2*. 3 Hr. PR: LAW 71.9. Application of federal income taxation to corporations and shareholders; and redemptions; Subchapter S.

MDS 124 260101
Old: 124 . The Human environment 3 Hr.

Memorandum

23 October 2006

To: Senate Executive Committee

Fr: J. Steven Kite, Chair, General Education Curriculum Oversight Committee

Re: **GEC Actions**

The GECO Committee met on 21 September and 12 October and recommends the following items for Faculty Senate approval.

Resolutions:

The Committee unanimously decided to set of goal of 80 percent success rates for first time audits, and to take necessary steps to reach this goal.

GEC-LSP Course Actions:

Successful GEC Audits

COMM 305: Appreciation of Motion Picture (GEC Obj. 5 and 7, LSP Cluster B)
COMM 308: Non-Verbal Communication (GEC Obj. 4 and 6, LSP Cluster B)
COMM 306: Comm in Organizations & Inst. (GEC Obj. 4 and 6, LSP Cluster B)
ECON 202 Principles of Macroeconomics (GEC Objective 5 and 6)
HUM 106 Promethean Myth, Modern Arts (GEC Objective 5 and 6)
PHIL 310: Phil. of Science (GEC Objectives 4 and 6, only. W is still pending)
RELG 105 Intro Issue in Religious Studies (GEC Obj. 4 and 6, LSP Cluster A).
RELG 222 Origins of Judaism (GEC Objectives 3 and 4*, LSP Cluster A).

Removal from GEC, LSP and FM&G lists, as requested by the Department:

ENGL 139: Contemporary African Lit from Objectives 5 & 9 LSP Cluster A and FM&G

***GEC Objective Change**

RELG 222 Origins of Judaism - GEC Objectives 3 and 4, changed from previous Objectives 3 and 9.

GEC-LSP Course Action Clarification *(added 20 October)***:**

The Committee clarifies that the LSP audits completed and approved by Faculty Senate in 2004-2005 implied approval for GEC Objectives for these courses:

RELG 219 History of Christianity (GEC Objectives 3 & 8, LSP Cluster A).
RELG 303 Studies in Christian Scripture (GEC Objectives 3 & 9, LSP Cluster A).
RELG 304 Studies in Hebrew Scripture (GEC Objectives 3 & 9, LSP Cluster A).