

Minutes  
West Virginia University Faculty Senate  
Monday, February 13, 2017

1. Lena Maynor, Faculty Senate Chair, called the meeting to order at 3:16 p.m. in Ruby Grand Hall, Erickson Alumni Center.

Members Present:

Abate, M.	Casey, F.	Flett, R.	Li, B.	Rowlands, A.
Abraham, R.	Clement, D.	Fuller, E.	Martucci, A.	Ruscello, D.
Ameri, S.	Collins, A.	Gannon, K.	Mattes, M.	Ryan, K.
Anderson, K.	Connors, J.	Goff, N.	Maynor, L.	Schimmel, C.
Atkins, C.	Cossman, L.	Harris, T.	McCombie, R.	Scott, D.
Barko, C.	Costas, M.	Harrison, N.	McCrary, J.	Shockey, A.
Bass, A.	Criser, A.	Hartley, D.	Merrifield, J.	Shrader, C.
Bastress, R.	Crosno, J.	Hauser, D.	Mitchell, M.	Singh-Corcoran, N.
Benedito, V.	Davari, A.	Hengemihle, B.	Montgomery-Downs, H.	Stimeling, T.
Bergner, G.	Davis, D.	Hodge, J.	Murphy, E.	Stolzenberg, A.
Bernardes, E.	Deshler, J.	Hornsby, G.	Murray, J.	Tou, J.
Bilgesu, I.	Di Bartolomeo, L.	Jackowitz, A.	Myers, S.	Tu, S.
Billings, H.	Donley, D.	Kiefer, A.	Nicholson, R.	Turton, R.
Boone, D.	Downes, M.	Kiefer, C.	Proudfoot, C.	Valenti, M.
Boyd, J.	Eller, W.	Kirby, B.	Prucz, J.	Weed, S.
Brock, R.	Eschen, E.	Kleist, V.	Rakes, P.	Weihman, L.
Brooks, R.	Famouri, P.	Knight, J.	Reddy, R.	Widders, E.
Brown, B.	Fint-Clark, B.	Krause, M.	Reymond, R.	Wietholter, J.
Burnside, J.	Fisher, S.	Kuhlman, J.	Rockett, I.	Wilcox, G.
Burt, A.	Fleming, S.	Lee, S.		

Members Excused:

Bishop, J.	Culcasi, K.	Murray, P.	Ryan, E.	Theeke, L.
Bowman, N.	Dietz, M.	Post, E.	Scott, H. R.	Thomas, J.
Bryner, R.	LaBarbara, J.	Rice, T.	Sowards, A.	Utzman, R.
Cohen, S.	McCusker, B.			

Members Absent:

Carpenter, R.	Floyd, K.	Ibrahim, M.	Mandich, M.	Tobin, G.
Cottrell, L.	Foley, K.	Lieving, G.	Schaefer, G.	Wilson, M.

Faculty Senate Officers Present:

Hileman, S.	Nutter, R.	Stolzenberg, A.	Turton, R.	Valenti, M.
Maynor, L.	Proudfoot, C.	Titolo, M.		

2. Chair Maynor moved for approval of the minutes from the Monday, January 9, 2017 meeting.  
Motion carried.
3. Vice Provost John Campbell reported the following:
  - On February 7, 1867 Governor Arthur Boreman signed a bill creating the Agricultural College of West Virginia, which became West Virginia University one year later. Last week, we held 150<sup>th</sup> anniversary celebrations at Davis College, Health Sciences, and the

Mountainlair, all of which were very well attended. We will have additional celebrations throughout the year.

- On February 10, we announced a \$10 million gift from Robert and Laura Reynolds to the College of Business & Economics. The gift will provide initial funding for a new Business & Economics building that will be located along the river at the site of the current Stansbury Hall. This is a long-term project that will require substantial effort in the coming years.
  - Students to be displaced by the closing of Arnold Hall were given the opportunity to reserve space in other dorms including Seneca Hall, the south tower of University Place. As of February 10, about 290 of the 450 spots in Seneca have been reserved. The north tower of University Place, consisting of apartment-style housing, has 467 of its 472 spots reserved.
  - The new legislative session began on February 8. In his state of the state address, Governor Justice outlined the issues facing West Virginia, including declining coal revenues, job losses, infrastructure, transportation, and public education. The state is facing a \$500 million deficit for a state budget of \$4.0-4.5 billion. The governor proposed a balanced budget which consisted of about \$26 million in cuts, including a \$5.9 million cut to WVU.
  - We held an open forum on January 30 relating to the White House travel ban. Our office of global affairs is engaged in ongoing conversations with students and interested faculty.
  - Joyce McConnell hosted a legislators forum on education on January 26-27. Twenty-four legislators attended. The session was extremely valuable, and we received requests for WVU to hold additional forums and to lead the way in addressing these issues.
  - The *National Jurist* ranked the WVU Law School second in the country in terms of greatest community impact. WVU's law clinics served over 500 clients or client groups in the past year. The article also cited WVU's flood relief efforts and immigration law clinic as part of that success.
  - The freshman engineering program reduced its DFW rate by 50% in four years. For fall 2016, only 10 percent of the full-time freshman engineering student population was on probation.
  - The CIO search committee will meet on March 1 to complete the review of applicants. They expect to start bringing candidates to campus by the end of March.
4. Nigel Clark, Campus Provost, provided an update on WVU Tech's transition to the Beckley campus.
5. Chair Maynor reported the following:
- Year Three Healthy Tomorrows forms are due by May 15. PEIA policyholders are required to comply with the initiative to avoid a \$500 increase in their medical deductible.
  - The Faculty Senate Volunteer Survey will be distributed this week. We will be requesting volunteers for committees and certain Faculty Senate officer positions.
  - Alan Stolzenberg has informed the Executive Committee that he will not be available to serve as faculty secretary after this semester.
6. Karen Haines, Chair, Curriculum Committee, moved for approval of the following reports:
- Annex I, New Courses Report. Motion carried.
  - Annex II, Course Changes Report. Motion carried.
  - Annex III, Capstone Courses Report. Motion carried.
  - Annex IV, Harmonization Report (New Courses). Motion carried.

Annex V, Harmonization Report (Course Changes). Motion carried after CE 347, 351, 361, 411, 425, 431, 461, and 462 were removed from the report.

Annex VI, Harmonization Report (Course Deactivations). Motion carried.

Annex VII, Harmonization Report (Aligned Courses), was presented for information.

Major in Multidisciplinary Studies. Motion carried.

7. Lisa DiBartolomeo, Chair, General Education Foundations Committee, reported that an email message has gone out to all faculty to notify them of review requirements and timelines for all courses previously transitioned from GEC to GEF. Courses not submitted through CIM by December 31, 2017, will be dropped from the GEF. Targeted workshops will be offered by the Teaching and Learning Commons.
8. Doina Jikich, Associate Director, Immigration Services, provided an update on the potential impact of the recent executive orders on immigration.
9. Fred King, Vice President of Research, provided an update on R1 status and research.
10. Roy Nutter, ACF Representative, reported the following:
  - He attended the HEPC and ACF meetings on February 3.
  - Fairmont State College met with the governor prior to the start of his term and noted that all extras had already been cut from their budget. For example, they have eliminated all services to the community and all extracurricular trips. All that remains in their budget is courses, and any further cuts would result in lay-offs. Dr. Nutter believes this situation is typical of 4-year colleges throughout West Virginia.
11. Stan Hileman, BOG Representative, reported the following:
  - The Board of Governors held special meetings on January 18 and 27 and a regular meeting on February 9-10.
  - The meeting on January 27 was to ratify the decision that Arnold Hall be closed and those students shifted to University Place.
  - On February 10, the BOG was informed that WVU finances were audited and given an unqualified, or clean, opinion. The BOG also celebrated the \$10 million gift from the Reynolds family.
  - The faculty constituency report will be presented at the next full meeting of the Board on April 20-21.
12. New Business

Travis Stimeling, on behalf of the Research and Scholarship Committee, moved for approval of a resolution related to the role of international students, faculty, and visiting scholars in support of WVU's mission. Motion carried.

Eddie Fuller, Eberly College, asked his colleagues to read HB 2335 in its entirety and to pay attention to its progress in the legislature. The bill purports to protect academic freedom in higher education.
13. The meeting adjourned at 4:55 p.m. to reconvene on Monday, March 13, 2017.

Judy Hamilton  
Office Administrator

To: Faculty Senate Executive Committee  
 From: Karen Haines, Chair, Senate Curriculum Committee  
 Date: January 23, 2017  
 Re: New Courses Report

Title	College	Credits	Prerequisite	Course Description	Curriculum Based Rationale
RPTR 249: GIS in Recreation and Tourism	AGFOR	3		Covers GIS applications in the temporal and spatial complexities of recreation and tourism.	According to the US Department of Labor, “workers with Geographic Information (GIS) skills are far more competitive in labor sectors with slower job growth, such as in the social sciences” and demand for trained GIS professionals is growing in the field of recreation and tourism. GIS technology has been used in a wide range of disciplines, including transportation, military, crime studies, forestry, watershed management, resource management, environmental studies, urban planning, marketing/real estate, population and demographic studies. This course is intended to make Recreation/tourism students more competitive in the job market by exposing them to the geospatial technology of GIS specifically using examples in social science and focused on spatial issues within the field.
BIOL 658: Systems Biology	AS	3	Consent	Systems Biology is an approach to understanding the dynamics of biological processes by integrating and assessing changes in and across networks. Technologies driving this approach include genome-wide sequencing of DNA and RNA, measurements of genome-protein interactions, and measurement of proteome levels and post-translational protein modifications.	This course will provide the framework for advanced understanding of unbiased experimental techniques. Review and critiques of current literature will enhance research. Oral presentations will improve scientific communication.
FIS 451: Arson and Explosives Analysis	AS	3	Dept. Approval	Examines the chemistry of combustion and the chemical analysis of ignitable liquids, explosives and post-combustion residues. The course relies heavily on instrumental methods of analysis, including various forms of chromatography and mass spectrometry. A laboratory component provides hands-on experience with interpreting data involving ignitable liquid residues and explosives.	This course is an elective course that provides expertise in an important sub-discipline of forensic science, arson and explosives analysis. Students will gain valuable in-depth experience in the analysis and interpretation of fire-scene evidence, which will help put them in a competitive position for future employment in a forensic laboratory service provider. There is no other similar course that provides the depth or specialty provided in this course.

Title	College	Credits	Prerequisite	Course Description	Curriculum Based Rationale
PSYC 724: Advanced Neuroscience	AS	4	Graduate Standing	In-depth exploration of nervous system anatomy and physiological processes, including the biological mechanisms underlying emotion, motivation, memory, and disease.	This course, along with the prerequisite Biological Aspects of Behavior (PSYC722) is designed to give graduate students a firm background in neuroscience, which is currently unavailable at WVU. This class will build on Biological Aspects of Behavior (PSYC722), going into much more detail, as would be expected of PhD students coming out of a PhD program in neuroscience. We anticipate that the course will serve Psychology, Biology, and other graduate students with an interest in neuroscience. Due to the research paper discussion sessions, the course requires more work than a standard 3 credit hour course, hence we are requesting 4 credit hours. Many graduate programs in aspirational-peer institutions use the same format for their equivalent neuroscience core course. The proposed course, with Biological Aspects of Behavior (PSYC722) as a prerequisite, is well in line with the standards for this course.
RUSS 351: Russian Through Music	AS	3	RUSS 204 or Consent	Conducted in Russian. Course acquaints students with the diverse music styles and genres in Russian culture, and develops Russian language proficiency through exposure to authentic textual and audio-visual materials of Russian classical and contemporary songs and music pieces, as well as discussions.	By integrating one of the most vibrant aspects of Russian culture, both old and new, this course helps students explore Russian music as well as develop their Russian language skills in a variety of ways. By addressing an important aspect of Russian culture, the course also addresses a gap in the current Russian curricular offerings by focusing on music from a language-learning perspective.
RUSS 352: Russian in Action	AS	3	RUSS 204 or Consent	Conducted in Russian. Course helps students improve fluency and authentic flair of speech by providing intensive practice in contemporary standard Russian pronunciation, stress, and intonation. Course helps students improve pronunciation and aural sensitivity to Russian speech.	This course meets a need in the existing Russian curriculum by providing students with a course concentrating almost exclusively on pronunciation, stress, and intonation, some of the most difficult aspects to master in Russian.
RUSS 450: Modern Russian Society	AS	3	RUSS 204 or Consent	Conducted in Russian. For students in the fourth year of Russian or higher. Course improves students' reading, speaking, listening, and grammatical skills, with a particular emphasis on post-Soviet language and culture. Topics focus on idiomatic language use and contemporary society.	RUSS 450 compliments the existing RUSS 451 course on Russian culture, which takes a historical perspective and offers students a long-term overview of Russian culture. RUSS 450, in contrast, enables students to bring their cultural communication skills up to the present era, offering them a chance to improve speaking, reading, writing, and listening in the process. The topics of 450 and 451 work in tandem in terms of material, but develop and enhance similar skills.

Title	College	Credits	Prerequisite	Course Description	Curriculum Based Rationale
CSAD 234: Anatomy and Physiology of Speech and Hearing	CEHS	4		An overview of anatomy, physiology, and neural pathways for the speech and hearing mechanisms. The respiration, phonation, articulation, and resonance systems will be highlighted for speech production. The outer ear, middle, and inner ear will be highlighted for hearing perception.	The undergraduate program in Communication Sciences and Disorders is undergoing revision to provide improved curricular offerings for students. The revisions will allow students more flexibility to pursue different areas of potential employment and/or graduate education. This course will provide content information on the anatomy, physiology, and neural pathways for the speech and hearing mechanisms.
CSAD 236: Language Science	CEHS	3		Study of the structure and function of human language. Methodologies used within the field of speech-language pathology to examine oral and written language will be utilized.	The undergraduate program in Communication Sciences and Disorders is undergoing revision to provide improved curricular offerings for students. The revisions will allow students more flexibility to pursue different areas of potential employment and/or graduate education. This course will provide content information regarding language science as applied within the field of speech-language pathology as a result of recent research and practice.
CSAD 426: Introduction to Speech Disorders	CEHS	3	CSAD 222	Introduction to the speech disorders of articulation, fluency, resonance and voice. Characteristics and course of treatment for the different disorder types will be discussed across the lifespan.	The undergraduate program in Communication Sciences and Disorders is undergoing revision to provide improved curricular offerings for students. The revisions will allow students more flexibility to pursue different areas of potential employment and/or graduate education. This course will provide content information on the common speech disorders present across the lifespan.
CSAD 436: Language Acquisition 2	CEHS	3	CSAD 336	Normal processes involved in the acquisition of oral and written language, including the later development of semantic, pragmatic, phonological, morphological, and syntactical systems. Application of these processes to the diagnosis and treatment of developmental language disorders.	The undergraduate program in Communication Sciences and Disorders is undergoing revision to provide improved curricular offerings for students. The revisions will allow students more flexibility to pursue different areas of potential employment and/or graduate education. This course will provide content information on the development of later language in both the oral and written format as well as address the role of the speech-language pathologist given recent national legislative changes.
CSAD 480: Speech and Language Assisting	CEHS	3	Consent	Assisting graduate clinicians in the treatment of speech, language, and swallowing disorders.	The undergraduate program in Communication Sciences and Disorders is undergoing revision to provide improved curricular offerings for students. The revisions will allow students more flexibility to pursue different areas of potential employment and/or graduate education. This course will provide content information on the common speech disorders present across the lifespan.

Title	College	Credits	Prerequisite	Course Description	Curriculum Based Rationale
RDNG 620: Specialized Literacy Professionals	CEHS	3		The Specialized Literacy Professional (SLP) course addresses history of the role of reading specialist, adult learning theory and contemporary research on the current role of the SLP/Reading Specialist.	Specialized Literacy Professional is a requirement of the Literacy Education Masters program. Given that LE is an advanced degree preparation program, all program candidates taking this course have valid teaching licensure; regardless of whether they are currently employed in the education field. This is an introductory course to the LE program and addresses the history and current roles and responsibilities of specialized literacy professionals, adult learning theory and coaching. There are no other courses in the college or department that address this specific content.
RDNG 689: Intervention for Struggling Readers	CEHS	3	RDNG 640	This practical experience is designed to give literacy education candidates opportunities to apply the theoretical concepts from previous coursework to practical teaching contexts. The practicum is defined as fieldwork experience that combines whole group class meetings, individual intervention sessions with a K-12 student, peer-coaching sessions, and individual supervision sessions.	Intervention for Struggling Readers is a required course for the Literacy Education (LE) Masters program. This course provides students with a practical experience that involves working directly with K-12 struggling readers and writers for one semester. The audience for this course are students enrolled in the LE program. While RDNG. 640 is the only prerequisite for this course, students taking RDNG. 689 will generally take this course towards the end of the program; having completed many of the other LE program requirements. There are no other courses in the college or department that address this specific content.
CE 526: Environmental Systems Modeling	CEMR	3		Theory and practice of systems thinking to understand the complexities of the hydrological cycle, analysis of hydrological time series for detection of trends and frequencies, stochastic and deterministic models for system dynamics, issues of equifinality and uncertainty.	Hydrological modeling techniques are continually evolving over time. One of the major thrusts in the environmental and hydrological studies is to understand and link several independent components (such as growth of pathogens with water quantity, sociological parameters) into a cohesive framework so that appropriate decision making activities can be planned. The course is designed for students to understand latest hydrological modeling techniques and then be able to apply such in real world case studies.
BMS 702: Biomedical Lab Experience	MED	2		Five week lab rotations within the laboratories of faculty affiliated with the biomedical graduate programs. They are designed for first year graduate students to gain laboratory experience and to pick a laboratory for their dissertation research.	Selecting a dissertation mentor is a required part of the curriculum for graduate students. This course serves the 7 PhD degree granting programs in the biomedical sciences. Performance in the laboratory is an essential evaluation for a PhD student in the sciences. Because this involves rotation with faculty in the biomedical sciences, no other course at the university fulfills this purpose.
BMS 707: Seminar: CTS Journal Club	MED	1		CTS Seminar	This is weekly journal club course that students will develop an understanding of the current state of the literature for clinical and translational sciences.



Title	College	Credits	Prerequisite	Course Description	Curriculum Based Rationale
BMS 747: Foundations for Contemporary Biomedical Research I	MED	4		<p>This course is the first of a two-part package that provides students with a foundation in cellular and molecular systems. It enables students to evaluate normal and pathological pathways while examining common issues that alter normal function. Students considering any research path directed toward human health and disease will find this course valuable.</p>	<p>This is the first of a new two-part course package. The purpose of this package is to impart a fundamental understanding of the functional components of a cell, and the basis for regulation of cellular processes and organ systems. The knowledge base is developed in an interactive faculty-student environment that requires interpretation and rational speculation to apply general concepts to specific situations and stimulate creative thought. It will establish an integrated foundation of knowledge for all biomedical graduate students. Pilot runs of the course have been very successful.</p>
BMS 777: Foundations for Contemporary Biomedical Research II	MED	4		<p>This course is the second of a two-part package that provides students with a foundation in cellular and molecular systems. It enables students to evaluate normal and pathological pathways while examining common issues that alter normal function. Students considering any research path directed toward human health and disease will find this course valuable.</p>	<p>This is the second of a new two-part course package. The purpose of this package is to impart a fundamental understanding of the functional components of a cell, and the basis for regulation of cellular processes and organ systems. The knowledge base is developed in an interactive faculty-student environment that requires interpretation and rational speculation to apply general concepts to specific situations and stimulate creative thought. It will establish an integrated foundation of knowledge for all biomedical graduate students. Pilot runs of the course have been very successful.</p>
PATH 409: Molecular Pathology for Laboratory Professionals	MED	2		<p>This course will provide students with an overview of the principles and applications of molecular techniques in pathology. A review of molecular and cancer biology will be included, and molecular pathways and biomarkers will be discussed with correlation to cancer types.</p>	<p>Molecular techniques are becoming more prevalent in laboratory medicine. More in depth instruction of molecular pathways and testing methodologies is necessary to provide a comprehensive education in order to graduate laboratory professionals prepared to work in modern pathology laboratories across the nation.</p>
PATH 652: Histology for Pathologists' Assistants	MED	3		<p>This course presents students with histology content requisite to their field of study. It includes both lecture and web-based instruction.</p>	<p>This class gives the students an overview of the concepts associated with the steps required to process tissue that they submit for analysis. It also gives them an overview of the special stains and studies that are used for diagnosis. Histology is a part of the anatomic pathology techniques portion of their national board exam.</p>
PHAR 707: Drug-Induced Diseases	PHAR	2		<p>Focused study of adverse effects of prescription and non-prescription medications designed for practical application across multiple disease states.</p>	<p>This elective course seeks to understand drug adverse effects through the question "What drugs may cause this disease state?" The result is a more practical study and application of clinical pharmacy and therapeutics. Medication adverse effects from all aspects of therapeutics and pharmacology courses in the PharmD curriculum will be used to provide a focused study of the adverse effects of drugs.</p>

Title	College	Credits	Prerequisite	Course Description	Curriculum Based Rationale
PHAR 836: Research in the Pharmaceutical Sciences	PHAR	3		An overview of the process of conducting health-related research focusing on concepts, principles and methodology involved with the research process. Students gain experience in research proposal development and practice writing skills. Student learning is facilitated by didactic lectures, active learning and independent small group sessions.	This course is a component of the revised PharmD curriculum. It assists students with understanding the research process and students gain experience in writing a research proposal.
PHAR 853: Hematology/Oncology	PHAR	4		Tenth course in the systems-based therapy series with a focus on hematology-oncology. Integrates scientific principles with clinical practice to enable students to prevent, identify, and resolve drug therapy problems in patients with hematological diseases and cancer.	Pharmacists must learn to manage the medications of patients with hematologic and oncologic conditions.
PHAR 854: Special Populations	PHAR	3		The final course in the systems-based therapy series that addresses special populations such as geriatrics, pediatrics and women's health (pregnancy, lactation, menopause) as well as disease processes that involve multiple body systems. Integrates scientific principles with clinical practice to enable students to prevent, identify, and resolve drug therapy problems.	The Doctor of Pharmacy curriculum is undergoing curricular revision. This is a new required course that covers the pathophysiology and therapeutics of diseases related to women's and men's health, as well as therapy of pediatric and geriatric patients.
SAGE 312: Integrated Pest Management	PS	3		In depth exploration of crop/animal pest and disease management, sanitation in disease prevention, identification of symptoms, current treatments of disease, insect identification methods, insect scouting, insect control methods, weed identification and beneficial organisms for sustainable production.	This course will support the curriculum of the Sustainable Agriculture Entrepreneurship curriculum. The addition of integrated pest management will allow the students to learn this additional set of skills that new producers should have entering the profession.
SAGE 318: Agricultural Project Management	PS	3		This course provides an understanding of the processes, tools, and practical knowledge needed to successfully manage agricultural projects. Students apply concepts to manage a typical project found in industry.	This course will support the curriculum of the Sustainable Agriculture Entrepreneurship curriculum. The addition of project management will allow the students to learn this valuable addition of skills that new producers should have entering the profession.

Title	College	Credits	Prerequisite	Course Description	Curriculum Based Rationale
SAGE 386: Junior Farm Work Experience 1	PS	3		This course will guide the development of the business planning for agriculture or forestry enterprises. With the in class problem-solving exercises, the enterprises will be evaluated for their human resources, strategic objectives and financial considerations. By the end of the course the business description section of personal business plan will be completed.	The junior farm experience class is designed to guide the students through the initial chapter development for a personalized farm, business plan. The students will also serve as farm labor and supervisors for the college owned agriculture-forestry enterprises. The combination of work and business plan development is unique to the Sustainable Agriculture Entrepreneurship curriculum.
SAGE 387: Junior Farm Work Experience 2	PS	3	SAGE 386	This course will guide the development of the business planning for agriculture or forestry enterprises. With the in-class problem-solving exercises, enterprise vision statements, mission statements and goals will be developed. The enterprise operations section of their personal farm business plan will be developed.	Designed to be the spring semester course following the fall SAGE 396. This course will continue the student development of a personalized farm - business plan. The students will also continue their required work on the college owned farms to learn the day to day requirements of running the enterprises. This course provides unique content to support the Sustainable Agriculture Entrepreneurship curriculum.
SAGE 446: Advanced Agriculture Forestry Entrepreneurship	PS	3	SAGE 280 or BUSA 310	This course will build on concepts covered in SAGE 280 or BUSA 310 to discuss business formation and how the development of the entrepreneurial mindset can lead to the successful formation and operation of agriculture and forestry enterprises.	Students will explore current successful business models of companies that are considered entrepreneurial. Student analysis of various company models will allow the students to explore the wide variety of creative businesses. This exploration and analysis by the student will show the student how to be successful in their own enterprise in the agriculture and forestry industry making this course a vital part to the Sustainable Agriculture applied science degree.
SAGE 451: Value-added Agriculture/Forestry Enterprises	PS	3	SAGE 446	The study of agriculture and forestry enterprises where you capture value or create value by marketing a unique product, filling a market niche, simplifying the supply chain, providing a service, or lowering costs.	This course is designed to support the Sustainable Agriculture Entrepreneurship curriculum with market entrepreneurship of including value-added product lines to the traditional agriculture and forestry products. The students will explore various methods of adding value to farm and forest products and evaluate them as income sources to increase farm revenue.
SAGE 486: Senior Farm Work Experience 1	PS	3	SAGE 387	This course will guide the development of creative and entrepreneurial business planning for agriculture or forestry enterprises. With the in-class creativity and brain-storming activities the students will develop their enterprise strategic plan. By the end of the course the financial section of personal business plan will be completed.	This course is designed to expand on the junior farm experience and to complete the students' personal farm business plan. Lecture content will explore in depth the elements of the business plan. The independent farm work allows the students to gain farm enterprise management experience. This course supports the SAGE curriculum and covers material not covered by any current courses for the PSC campus. This is a PSC only course and will not transfer to the Morgantown Campus.

Title	College	Credits	Prerequisite	Course Description	Curriculum Based Rationale
SAGE 487: Senior Farm Work Experience 2	PS	3	SAGE 486	This course will guide the development of creative and entrepreneurial business planning for agriculture or forestry enterprises. With in-class creativity and brain-storming activities the students will develop their specialized test market(s) to match their specific enterprise. By the end of the course the student's personal farm business plan will be completed.	This course is the final course of the work experience and business plan development for the students in the SAGE BAS track. Students will demonstrate professionalism by creating a thorough and complete business plan, presentation of that plan and analyses of test markets, distribution, pricing, sales, and personal SWOT.

To: Faculty Senate Executive Committee  
 From: Karen Haines, Chair, Faculty Senate Curriculum Committee  
 Date: January 23, 2017  
 Re: Course Changes

Course Number and Title	Old Value	New Value
<b>ASTR 110: Explosions in Space</b>		
Prerequisite Change	MATH 126 or higher, or QRA score qualifying for MATH 126	MATH 126 or higher, or appropriate score on MATH placement test.
Justification for Change		No changes to course, simply a change to reflect change in math placement test name.
<b>ASTR 115: Honors Relativity</b>		
Prerequisite Change	MATH 126 or higher or QRA of 24 with a minimum of 15 on part 1.	MATH 126 or higher or appropriate score on MATH placement test.
Justification for Change		No changes to course. Simply correcting pre-requisites to reflect change in name of math placement exam.
<b>CHEM 111: Survey of Chemistry</b>		
Credit hours	0	4
Variable Credit	Yes	No
Prerequisite		WVU sections require MATH 122 with a minimum grade of C- or ALEKS Score of ML 20 or Math ACT Score of 22 or Math SAT Score of 540 or Math SAT (March 2016) Score of 570 or PR or CONC: MATH 126A or MATH 126B or MATH 126C or MATH 129 or MATH 150 or MATH 153 or MATH 155, WVUIT and PSC sections require MATH 122 with a minimum grade of C- or ALEKS Score of ML 10 or Math ACT Score of 19 or Math SAT Score of 460 or Math SAT (March 2016) Score of 500 or PR or CONC: MATH 126A or MATH 126B or MATH 126C or MATH 129 or MATH 150 or MATH 153 or MATH 155.
Course Description	Designed primarily for students taking only one year of college chemistry. Atomic structure; chemical bonding; acids, bases, and salts; periodicity; properties of gases, liquids, and solids; stoichiometry; oxidation-reduction. (3 hr. lec., 3 hr. lab.) (Students may not receive credit for CHEM 115 or CHEM 117 and for CHEM 111.) (CHEM 111 and CHEM 112 cannot be used as pre-requisite courses for organic chemistry; students anticipating the possibility or likelihood of taking organic chemistry must have credit for CHEM 115 and CHEM 116 or for CHEM 117 and CHEM 118.	Designed primarily for students taking only one year of college chemistry. Atomic structure; chemical bonding; acids, bases, and salts; periodicity; properties of gases, liquids, and solids; stoichiometry; oxidation-reduction. (3 hr. lec., 3 hr. lab.) (Students may not receive credit for CHEM 115 or CHEM 117 and for CHEM 111.)

Justification for change		This request is to establish a minimum prerequisite that a student would need to satisfy in order to enroll in Chem 111 – Survey of Chemistry in the future. Last summer, we noticed that there was a significant number of students coming through NSO who wanted to pursue a major such as nursing or dental hygiene which requires Chem 111/112. However, many of them are entering WVU with very weak math backgrounds (low math ACT or low math SAT scores). Some of these students were told to enroll in a basic math course such as Math 122 or Math 126 to improve their basic algebra skills before taking Chem 111. After discussions with Joe Seiaman, executive director of university advising, we decided (in view of the limited amount of lab space available for Chem 111 especially in the fall term) to set some minimum math prerequisite requirement before a student would be allowed to enroll in Chem 111. After reviewing the available D/F/W data for Chem 111 last year, Joe recommended that we consider using the following prerequisite criteria for Chem 111. Future Chem 111 students will have to satisfy ONE of these criteria: 1. A minimum ALEKS score of 45 (ML 20) OR 2. A minimum math ACT score of 22 OR 3. A minimum math SAT score of 540 or 570 (March 2016 or later) OR 4. A minimum grade of C(-) in Math 122 OR 5. A passing grade in Math 126 or a higher math course (including Math 129, 150, 153, and 155) The following e-mail was provided by Professor Eddie Fuller of the WVU Department of Mathematics: The Department of Mathematics supports this set of prerequisites for CHEM 111 and sees no problem with implementing any portion of the needed ALEKS testing or managing changes to course populations (which we project to be minimal).
<b>COMM 306: Organizational Communication</b>		
Title Change	Human Communication in Organizations and Institutions	Organizational Communication
Course Description	Communication processes and problems in business and nonbusiness organizations and institutions with attention to practical application. This course is not open to freshmen.	Instruction on the role that culture plays in organizations with adaption of one's communication to be successful; understand appropriate and effective communication in the superior-subordinate relationship; evaluate organizational problems with strong communication strategies and the impact of organizational structure on communication.
Justification for Change		New title is concise.
<b>MATH 126C: College Algebra 3-Day</b>		
Prerequisites		ALEKS; ML 30 (score)
Justification for Change		Math 126C did not have the Aleks score added to BANNER when we added the new placement test. Scores were added to 126A and 126B, but not 126C. Students from High School ACCESS will now take the Aleks placement assessment and to avoid hand overrides for qualified students, the Aleks score must be entered into Banner.
<b>PSYC 379: Community Psychology</b>		
Course Description	Psychological principles applied to treatment and intervention at the community level, manpower development, organizational change, and systems analysis.	Applications of learning principles to community programs. Topics may include education, youth violence, drug abuse, behavioral safety, and organizational behavior management.
Prerequisites	PSYC 202 or PSYC 203 or PSYC 204 or PSYC 231 or PSYC 232 or PSYC 241 or PSYC 251 or PSYC 293 and at least junior standing.	PSYC 202 or PSYC 203 or PSYC 204 or PSYC 231 or PSYC 232 or PSYC 241 or PSYC 251 and at least junior standing.
Justification for Change	Updated prerequisites	A change in the catalog description is needed to accurately reflect the changes described in the curriculum-based rationale.
<b>PSYC 474: Applied Behavior Analysis</b>		

Course Description	Basic principles of behavior and their application to changing significant human behavior. Includes clinical, educational, parenting, industrial/organizational, community, and other applications.	The application of basic learning principles to changes in socially significant human behavior.
Justification for Change		A change in the catalog description is needed to more accurately reflect course content and reduce what might have been confusing overlap with the catalog description for PSYC 379.
<b>STAT 211: Elementary Statistical Inference</b>		
Prerequisites	MATH 126 or higher.	MATH 122 or higher.
Variable Credit	Yes	No
Credit hours	0	3
Justification for Change		The Department of Mathematics recently started offering the course MATH 122, designed to be an algebra review prerequisite for the College Algebra course MATH 126. The Department of Statistics reviewed the learning outcomes of MATH 122 and finds that the content of MATH 122 more accurately reflects the nature of the mathematics needed in STAT 211 than does the current prerequisite, MATH 126.
<b>STAT 215: Introduction to Probability and Statistics</b>		
Division	WVU	WVU and PSC
Justification for Change		The only change is making it explicit that Potomac State College can offer this course. The request is being made on behalf of Vicki Huffman, STEM Division Chair at PSC.
<b>ENTR 400: Fundamentals of Entrepreneurship</b>		
Division	WVU Course	WVU and WVUIT
Prerequisite Change	BCOR 350 and BCOR 370.	PR or CONC: BCOR 350 and BCOR 370.
Justification for Change		Need Tech campus level (UT) added for registration purpose.
<b>FIN 310: Investments</b>		
Prerequisite Change	BCOR 340 with a minimum grade of B and PR or CONC: FIN 330.	BCOR 340 with a minimum grade of B- and PR or CONC: FIN 330.
Justification for Change		Correcting Catalog description to match actual prerequisites list.
<b>CSAD 222: Phonetics and Phonology</b>		
Title Change	Phonetics	Phonetics and Phonology
Number Change	322	222
Description Change	Standard speech sounds of the English language. Use of phonetic symbols for recording speech sounds. Classification systems presented.	Description, classification, and transcription of the speech sounds in English. Phonetic and phonological principles will be emphasized in normal, dialectal, and clinical speech and language contexts, particularly as these principles apply to speech-language pathology and audiology.
Prerequisite Change	CSAD 200 or consent	CSAD 200 and LING 101 or consent.

Justification for Change		The undergraduate program in Communication Sciences and Disorders is undergoing revision to provide improved curricular offerings for students. This course's pre-requisites, title, course number, and course description are being modified to align with changes to the overall undergraduate curriculum that are currently being submitted.
<b>CSAD 320: Speech Science</b>		
Credit hours	4	3
Catalog Description	Detailed discussion of the speech production process, including acoustic, anatomic, and physiological aspects of speech production.	Review of the fundamental concepts related to acoustics, perception and production of speech, and associated theoretical models.
Prerequisites	CSAD 200 or consent	CSAD 200, CSAD 234 or consent.
Justification for Change		Within our undergraduate revision, this course will increase the depth of instruction in speech acoustics and theoretical models of speech motor control. Previous content related to anatomy and physiology of the speech mechanism has been removed from this course and included in a new course, CSAD 234: Anatomy and Physiology of Speech and Hearing.
<b>CSAD 336: Language Acquisition 1</b>		
Number Change	324	336
Title Change	Language Acquisition	Language Acquisition 1
Prerequisite Change	CSAD 320 and CSAD 322.	CSAD 222 and CSAD 236.
Description Change	Normal processes involved in the acquisition of language, including the development of phonological, semantic, morphological, pragmatic and syntactical systems. Application of these processes to the diagnosis and treatment of language disorders.	Normal processes involved in the acquisition of language, including the development of phonological, semantic, morphological, pragmatic, and syntactical systems in prelinguistic, emergent, and developing language stages. Application of these processes to the diagnosis and treatment of language disorders.
Justification for Change		The undergraduate program in Communication Sciences and Disorders is undergoing revision to provide improved curricular offerings for students. This course's pre-requisites, title, course number, course description, and learning objectives are being modified to align with changes to the overall undergraduate curriculum that are currently being submitted.
<b>CSAD 340: Hearing Science</b>		
Credit hour change	4	3
Prerequisite Change	CSAD 320.	CSAD 200 and CSAD 234.
Description Change	Detailed discussion of auditory processing in the speech perception process, including acoustic, anatomical, and physiological aspects of speech perception.	The purpose of this course is to provide the student with basic knowledge in two areas of hearing science: the physics of sound (acoustics) and the perception of sound (psychoacoustics). This knowledge will provide a foundation for further study in the field of communication sciences and disorders.



Justification for Change		Within our undergraduate revision, this course will increase the depth of instruction in hearing acoustics and psychoacoustics. Content related to anatomy and physiology of the hearing mechanism has been included in a new course, CSAD 234: Anatomy and Physiology of Speech and Hearing.
<b>CSAD 342: Introduction To Audiology</b>		
Title Change	Hearing Screening Programs	Introduction to Audiology
Prerequisite Change	CSAD 200 or consent	CSAD 234.
Catalog Description	Disorders of hearing; screening programs from birth through geriatrics; introduction to industrial programs.	Introduction to the profession of audiology; principles of hearing screening, audiological assessment and treatment; disorders of hearing; audiogram interpretation.
Justification for Change		The undergraduate program in Communication Sciences and Disorders is undergoing revision to provide improved curricular offerings for students. The revisions will allow students more flexibility to pursue different areas of potential employment and/or graduate education.
<b>CSAD 482: Speech and Language Practicum</b>		
Title Change	Clinical Practice/Speech Language Pathology	Speech and Language Practicum
Description Change	Orientation to clinical methods for evaluation and treatment of speech language disorders. (Graded pass/fail).	Clinical Practicum in treatment of speech, language, and swallowing disorders.
Prerequisite Change	Consent	CSAD 480 with a grade of B- and consent.
Capstone	Yes	No
Justification for change		The title and course description were changed to better reflect the content of the course. Grading was changed to regular mode to allow instructors to better reflect the performance of individual students. The prerequisite CSAD 480 is a new course that will provide the foundation for success in CSAD 482. This course will no longer be part of the required course sequence and will now be an elective; therefore it is no longer part of the capstone.
<b>PHAR 860: Current Topics in Pharmacy</b>		
Number Change	774	860
Justification for Change		This course is being renumbered to the 800 level to be consistent with all Doctor of Pharmacy courses. No other changes are being made.

### Deactivations

ADV 559: Advertising Campaigns  
 BIOL 649: Principles of Neuroscience II  
 BIOL 749: Principles of Neuroscience II  
 JRL 586: Video Bureau Reporting  
 BTEC 105: Principles of Marketing  
 PR 559: Public Relations Campaigns  
 SAGE 120: Plant and Animal Health  
 SAGE 131: Agricultural Mathematics  
 MINE 685: Graduate Seminar in Coal Mining  
 MINE 686: Graduate Seminar in Coal Mine

To: Faculty Senate Executive Committee  
 From: Karen Haines, Chair, Senate Curriculum Committee  
 Date: January 23, 2017  
 Re: Capstone Report

**How will students demonstrate each of the following abilities:**

Course	College	Gather material independently, as needed	Think critically about and to integrate the theoretical and/or practical knowledge that they have acquired throughout their undergraduate careers:	Reflect on the ethical (or societal) issues that are implicit in their project and/or project's design:	How is the written component of the Capstone Experience completed?	How is the oral component of the Capstone Experience completed?
SAGE 487: Senior Farm Work Experience 2	POT	This course will require the students to compile their personalized business plan from other junior and senior level courses. This plan will be a complete business plan that will allow the student to pursue establishment of an agricultural or forestry based enterprise upon graduating.	The development of a personalized business plan will require students to integrate all aspects of their studies for business content and production skills/knowledge that is specific to their intended enterprise. The plan will need to communicate their knowledge to professionals in the agriculture and forestry arena sufficiently to help the graduate obtain support to initiate their business.	The students will incorporate into the business plan various sections that will address the current climate for their intended products and self-evaluation plan to adapt to changes in the industry.	The students will complete various sections of the business plan in their senior level classes and compile them during the final experience. They will add the supporting documents/appendices and statements that will allow them to enter the agriculture or forestry entrepreneurial arena upon graduation with a complete and professional business plan.	Students will be required to present their business plan and marketing pitch to a panel of faculty and local business professionals. They will create, present and defend in a professional manner the business plan and idea they have developed.

Harmonization Report - New Courses					
Title	College	Credits	Prerequisites	Curriculum Based Rationale	Course Description
ACCT 323: Accounting Systems	TS	3	ACCT 311	WVUIT's ACCT 322 Accounting System course was found to be a combination of ACCT 321 and ACCT 322. Thus, ACCT 322 was deactivated at WVUIT and ACCT 323 is requested as a replacement.	Analysis of data processing fundamentals and information systems analysis, design, and implementation, including necessary computer hardware and software components with particular reference to accounting information systems and the controls necessary there in.
CHE 211: Material Balances	TE	3	CHEM-116 and Conc: MATH 155	Significant differences between WVU and WVUIT's CHE 201 required the separation of the two courses and renumbering the WVUIT version to CHE 211.	Introduction to chemical engineering fundamentals and calculation procedures, with emphasis on industrial stoichiometry
CHE 212: Energy Balances	TE	3	CHE-211 or CHE-201	Significant differences between WVU and WVUIT's CHE 202 required the separation of the two courses and renumbering the WVUIT version to CHE 212.	Continuation of topics from CHE 211, with an emphasis on energy balances.
CHE 317: Transport Operations 2	TE	4	CHE 316 or (CHE 310 and 311) and CHE 320	Significant differences between WVU and WVUIT's CHE 312 required the separation of the two courses and renumbering the WVUIT version to CHE 317.	Continuation of CHE 316 with emphasis on mass transfer theory and its application to process operations.
CS 355: Computer Concepts	TE	3	CS 265 and CS 231	Significant differences between WVU and WVUIT's CS 350 required the separation of the two courses and renumbering the WVUIT version to CS 355.	System software organization; operating system concepts including processes, threads, memory management, and the user interface; elementary network concepts.
CPE 320: Microprocessor Systems	TE	3	CPE 271	Significant differences between WVU and WVUIT's CPE 310 required the separation of the two courses and renumbering the WVUIT version to CPE 320.	Introduction to microcomputer systems with emphasis on the use of a microcontroller as a digital design element. Topics include basic computer architecture, binary number systems and codes, binary arithmetic and logic operations, parallel and serial I/O, A/D conversion, timers and counters, and interrupts. Student required to develop assembly language and C-language software for interfacing to various peripherals. Microcontroller used to present case studies on several data collection and control examples.
CPE 321: Microprocessor Systems Laboratory	TE	0-3	Conc: CPE 320	Significant differences between WVU and WVUIT's CPE 311 required the separation of the two courses and renumbering the WVUIT version to CPE 321.	Machine language, assembly language and hardware and software interfacing. (This includes editing, linking, and debugging.) Memory, I/O and basic techniques of microprocessor interfacing.
EE 365: Analog Electronics	TE	3	EE 221 and EE 222	Significant differences between WVU and WVUIT's EE 355 required the separation of the two courses and renumbering the WVUIT version to EE 365.	Semiconductors, p-n junction diodes, theory and application. Bipolar junction transistors, operation biasing and BJT as an amplifier. JFET's and MOSFET's theory operation and applications. Small-signal low-frequency analysis and design.
EE 366: Analog Electronics Laboratory	TE	0-3	Conc: EE 365	Significant differences between WVU and WVUIT's EE 356 required the separation of the two courses and renumbering the WVUIT version to EE 366.	Design, fabrication, and measurement of analog electronic circuits. Study of biasing, stability, and frequency response.

Code	Field	Old Value	New Value
<b>ACCT 311 : Intermediate Accounting</b>	Catalog Prerequisite	(ACCT 201 with a grade of B or better) and (ACCT 202 with grade of B or better) and ECON 202 and ECON 225 and ENGL 102 and (MATH 150 or MATH 155 or (MATH 153 and MATH 154)) and PR or CONC: ACCT 321	(ACCT 201 with a grade of B or better) and (ACCT 202 with grade of B or better) and PR or CONC: ACCT 321
	Catalog Description	Development of accounting theory and practice, with emphasis on asset accounting.	Development of accounting theory and practice, with emphasis on asset accounting. (WVUIT sections do not require ACCT 321, and only require a C- for ACCT 201 and ACCT 202)
	Curriculum Based Rationale		Footnote indicates difference in progression through Accounting Systems course(s) that differ on WVU's campuses.
<b>ACCT 312 : Intermediate Accounting</b>	Catalog Description	Theory and practice with respect to accounting for liabilities and stockholders equity; special problems peculiar to financial accounting; analysis of financial statements and changes in financial position.	Theory and practice with respect to accounting for liabilities and stockholders equity; special problems peculiar to financial accounting; analysis of financial statements and changes in financial position. (WVUIT sections do not require ACCT 321)
	Curriculum Based Rationale		Footnote indicates difference in progression through Accounting Systems course(s) that differ on WVU's campuses.
<b>ACCT 415 : Advanced Accounting</b>	Catalog Prerequisite	ACCT 312	ACCT 312 and (ACCT 321 or 323)
	Curriculum Based Rationale		Restructuring of prerequisites and curriculum progression to accommodate differences in campus offerings while meeting accreditation standards.
<b>ACCT 416 : Advanced Accounting Theory</b>	Catalog Prerequisite	ACCT 312 and consent	ACCT 312 and (ACCT 321 or 323)
	Curriculum Based Rationale		Restructuring of prerequisites and curriculum progression to accommodate differences in campus offerings while meeting accreditation standards.

<b>ACCT 450 : Accounting Technology</b>	Catalog Prerequisite	ACCT 322	ACCT 322 or ACCT 323
	Curriculum Based Rationale		Restructuring of prerequisites and curriculum progression to accommodate differences in campus offerings while meeting accreditation standards.
<b>ACCT 461 : Accounting for Nonbusiness Entities</b>	Catalog Prerequisite	ACCT 312	ACCT 312 and (ACCT 321 or 323)
	Curriculum Based Rationale		Restructuring of prerequisites and curriculum progression to accommodate differences in campus offerings while meeting accreditation standards.
<b>ACCT 471 : International Accounting</b>	Catalog Prerequisite	ACCT 312 or consent	ACCT 312 and (ACCT 321 or 323)
	Curriculum Based Rationale		Restructuring of prerequisites and curriculum progression to accommodate differences in campus offerings while meeting accreditation standards.
<b>CHEM 494 : Seminar</b>	Course Division	W	WT
	Curriculum Based Rationale		Upon examination, WVUIT's CHEM 403 was found to be more aligned with CHEM 494.
<b>CPE 271 : Introduction to Digital Logic Design</b>	Catalog Description	An introduction to the design of digital networks and computers. Topics include number systems, coding, Boolean and switching algebra, logic design, minimization of logic, sequential networks, and design on digital subsystems	Introduction to the design of digital systems. Topics include number systems, coding, Boolean and switching algebra, minimization of logic, analysis and design of combinational and sequential logic circuits.
	Curriculum Based Rationale		Change in description was a result in consultation on shared course topics to better describe courses on both campuses.
<b>CPE 442. Introduction to Digital Computer Architecture</b>	Catalog Prerequisite	MATH 375 and CPE 310 and CPE 311	(MATH 375 or MATH 378) and (CPE 310 or CPE 320)

	Curriculum Based Rationale		Change in prerequisites allows for differing course between WVU and WVUIT
<b>CPE 462 : Wireless Networking</b>	Catalog Prerequisite	PR: EE 327 and STAT 215.	PR: EE 327 and (STAT 215 or MATH 448)
	Curriculum Based Rationale		Change was a result of WVUIT lacking STAT 215 and thus agreed to utilize similar course as prerequisite.
<b>EE 221 : Introduction to Electrical Engineering</b>	Catalog Description	The definition of current, voltage, power, energy, resistance, capacitance, and inductance. The steady-state analysis of DC and AC circuits using the basic laws of circuits analysis: Ohm's Law, Kirchhoff's Laws, voltage divider, current divider, superposition, source transformation, Thevenin and Norton equivalent circuits, nodal analysis, mesh analysis, and maximum power transfer. Operations of capacitors and inductors. Basic steady state sinusoidal signals, phasors and circuit analysis. The definition of average and RMS values will be covered.	Electrical engineering units, circuit elements, circuit laws, measurement principles, mesh and node equations, network theorems, operational amplifier circuits, energy storage elements, sinusoids and phasors, sinusoidal steady state analysis, average and RMS values, complex power. (WVU-IT does not require PHYS 111 as a prerequisite)
	Curriculum Based Rationale		Footnote indicates differences in prerequisite requirements based on varying program progression on WVUIT campus.
<b>EE 223 : Electrical Circuits</b>	Catalog Prerequisite	PR: EE 221 and EE 222 and PHYS 112 and MATH 251	PR: EE 221 with grade of C- or better and EE 222 with grade of C- or better and MATH 251 with grade of C- or better and PHYS 112.

	Catalog Description	Time response of RC and RL circuits, unit step response, second order circuits, poly-phase systems, mutual inductance, complex frequency, network frequency response, two-port networks and transformers. Fourier methods and Laplace Transforms.	Time response of RC and RL circuits, unit step response, second order circuits, poly-phase systems, mutual inductance, complex frequency, network frequency response, two-port networks and transformers. (WVU-IT does not require PHYS 112 as a prerequisite).
	Curriculum Based Rationale		Footnote indicates differences in prerequisite requirements based on varying program progression on WVUIT campus.
<b>EE 329 : Singals and Systems 2</b>	Catalog Prerequisite	PR: EE 327 and STAT 215	PR: EE 327 and (STAT 215 or MATH 448)
	Curriculum Based Rationale		Footnote indicates differences in prerequisite requirements based on varying program progression on WVUIT campus.
<b>EE 335 : Electromechanical Energy Conversion Systems</b>	Catalog Description	Electric energy sources, fundamentals of electromechanical energy conversion, transformers and rotating machinery, transmission line parameters.	Electric energy sources, fundamentals of electromechanical energy conversion, transformers and rotating machinery. (at WVU-IT, the PHYS 112 PR is replaced by CoReq EE 345.)
	Curriculum Based Rationale		Footnote indicates differences in prerequisite requirements based on varying program progression on WVUIT campus.
<b>EE 336 : Electromechanical Energy Conversion and Systems Lab</b>	Catalog Description	Single-phase transformer, dc motor and generator performance and characteristics, synchronous machine performance and characteristics.	Transformers, DC motor and generator performance and characteristics, synchronous machine performance and characteristics.
	Curriculum Based Rationale		Footnote indicates differences in prerequisite requirements based on varying program progression on WVUIT campus.

<b>EE 345 : Engineering Electromagnetics</b>	Catalog Description	Continued use of vector calculus, electrostatics, magnetostatics, Maxwell's Equations, and boundary conditions. Introduction to electromagnetic waves, transmission lines, and radiation from antennas.	Continued use of vector calculus, electrostatics, magnetostatics, Maxwell's Equations, and boundary conditions. Introduction to electromagnetic waves, transmission lines, and radiation from antennas. (WVU-IT also requires EE 223 as a PR.)
	Curriculum Based Rationale		Footnote indicates differences in prerequisite requirements based on varying program progression on WVUIT campus.
<b>EE 431 : Electrical Power Distribution Systems</b>	Course Division	W	WT
	Curriculum Based Rationale		WVUIT was found to be teaching this course, despite not appearing as such in Banner.
<b>EE 435 : Introduction to Power Electronics</b>	Catalog Prerequisite	PR: EE 335 and EE 355 and EE 356 or consent	PR: EE 335 and EE 355 and EE 356
	Curriculum Based Rationale		Consent was found to be unnecessary and not utilized by WVUIT.
<b>EE 436 : Power Systems Analysis</b>	Catalog Description	Incidence and network matrices, Y-Bus, symmetrical and unsymmetrical faults, load-flow and economic dispatch, MW-frequency and MVAR-voltage control. The power system simulator will be used for demonstrations.	Power system network modeling, network calculations by matrices, node equations, node elimination, bus admittance, impedance matrices, and fault calculations. Transmission line inductance, capacitance, network models, and power circle diagrams. Symmetrical and unsymmetrical faults. Load flow and economic dispatch.
	Curriculum Based Rationale		Change in description was a result in consultation on shared course topics to better describe courses on both campuses.



<b>EE 461 : Introduction to Communication Systems</b>	Catalog Description	Introduction to the first principles of communications systems design. Analysis and comparison of standard analog and pulse modulation techniques relative to bandwidth, noise, threshold, and hardware constraints. Communications systems treated as opposed to individual circuits and components of the system.	Application of random processes and spectral analysis to the design and analysis of communication systems. Analysis and comparison of standard modulation techniques relative to bandwidth, noise, threshold, and hardware constraints.
	Curriculum Based Rationale		Change in description was a result in consultation on shared course topics to better describe courses on both campuses.

**Harmonization Report - Course Deactivations**

Dept Code	Subject	Course	Course Title	Action Needed	W Approver	P Approver	T Approver
WT	CE	202	Concrete Canoe/Steel Bridge Design and Construction	Deactivate at WVU and WVUIT	Hema Siriwardane		Steven Leftwich
WT	CE	332	Introduction to Transportation Engineering	Deactivate at WVUIT			Steven Leftwich
W	CE	412	Concrete and Aggregates	Deactivate at WVU	Hema Siriwardane		
W	CE	465	Conceptual Design of Structure	Deactivate at WVU	Hema Siriwardane		
WT	CPE	310	Microprocessor Systems	Deactivate at WVUIT			Stephen Goodman
WT	CPE	311	Microprocessor Laboratory	Deactivate at WVUIT			Stephen Goodman
WPT	CPE	450	Introduction to Microelectronics Circuits	Deactivate at WVU and PSC	Brian Woerner	Vicki Huffman	
WT	EE	311	Junior Instrumentation Lab	Deactivate at WVU	Brian Woerner		
WT	EE	355	Analog Electronics	Deactivate at WVUIT			Stephen Goodman
WT	EE	356	Analog Electronics Laboratory	Deactivate at WVUIT			Stephen Goodman

## Harmonization - Aligned Courses

Dept Code	Subject	Course	Course Title	P Approver	T Approver
WT	CE	451	Foundation Engineering		Steven Leftwich
WT	CE	463	Steel Design		Steven Leftwich
WT	CE	464	Timber Design		Steven Leftwich
WT	CE	479	Integrated Civil Engineering Design-Capstone		Steven Leftwich
WT	CHEM	347	Physical Chemistry Laboratory		Hasan El-Rifai
WT	CHEM	349	Physical Chemistry Laboratory		Hasan El-Rifai
WT	CPE	272	Digital Logic Laboratory		Stephen Goodman
WPT	EE	222	Introduction to Electrical Engineering Laboratory	Vicki Huffman	Stephen Goodman
WPT	EE	224	Electrical Circuits Laboratory	Vicki Huffman	Stephen Goodman
WT	EE	327	Signals and Systems 1		Stephen Goodman
WT	EE	411	Fundamentals of Control Systems		Stephen Goodman
WT	EE	413	Introduction to Digital Control		Stephen Goodman
WT	EE	445	Introduction to Antennas		Stephen Goodman
WT	EE	463	Digital Signal Processing Fundamentals		Stephen Goodman
WT	EE	480	Senior Design Project		Stephen Goodman
WT	EE	481	Senior Design Project		Stephen Goodman
WP	HORT	220	General Horticulture	Phillip Douthitt	
WP	HORT	260	Woody Plant Materials	Phillip Douthitt	
WPT	MATH	121	Intro Concepts Of Mathematics	Vicki Huffman	Bing Yang
WT	MATH	126A	College Algebra 5-Day		Bing Yang
WT	MATH	126B	College Algebra 4-Day		Bing Yang
WPT	MATH	126C	College Algebra 3-Day	Vicki Huffman	Bing Yang
WPT	MATH	128	Plane Trigonometry	Vicki Huffman	Bing Yang
WPT	MATH	129	Pre-Calculus Mathematics	Vicki Huffman	Bing Yang
WPT	MATH	150	Applied Calculus	Vicki Huffman	Bing Yang
WPT	MATH	155	Calculus 1	Vicki Huffman	Bing Yang
WPT	MATH	156	Calculus 2	Vicki Huffman	Bing Yang

## RESOLUTION

Whereas, West Virginia University is a land-grant institution with a mission to “deliver high-quality education, excel in discovery and innovation, model a culture of diversity and inclusion, promote health and vitality, and build pathways for the exchange of knowledge and opportunity between the state, the nation and the world”;

Whereas, West Virginia University seeks to “attain national research prominence, thereby enhancing educational achievement, global engagement, diversity, and the vitality and well-being of the people of West Virginia”;

Whereas, West Virginia University boasts a community of faculty, staff, and students from more than one hundred nations;

Whereas, scholarship and creativity thrive on open communication, dialogue, and exchange;

Whereas, the West Virginia University Faculty Senate “is responsible for guiding WVU’s academic pursuits and for communicating faculty opinions and concerns”;

Whereas, the administration of President Donald J. Trump has raised a number of challenges to restrict travel to the United States; be it

Resolved, that the West Virginia University Faculty Senate unequivocally affirms its commitment to fostering diversity, inclusion, and open dialogue at West Virginia University;

Resolved, that the West Virginia University Faculty Senate recognizes that the faculty, staff, and students of West Virginia University travel both domestically and internationally in their quest for knowledge;

Resolved, that the West Virginia University Faculty Senate commends WVU President E. Gordon Gee, Provost Joyce McConnell, and Vice-President for Global Strategies and International Affairs William Brustein for supporting international faculty and students during the immediate aftermath of President Trump’s recent Executive Order to restrict the travel of citizens of Iran, Iraq, Syria, Yemen, Libya, Sudan, and Somalia to the United States;

Resolved, that the West Virginia University Faculty Senate calls for Faculty Senate Chair Lena Maynor to draft and submit a letter to Senator Shelley Moore Capito, Senator Joseph Manchin III, Congressman David McKinley, Congressman Alex Mooney, and Congressman Evan Jenkins to convey the key role that international travel, visits from international scholars, and the enrollment of international students plays in the University’s ability to support its mission;

Resolved, that the West Virginia University Faculty Senate calls for West Virginia University to offer direct support in the form of legal assistance, summer housing, and other similar measures to support international students impacted by federal travel restrictions.