

College of Agricultural Sciences and Natural Resources
Curriculum Committee
Summary of Actions
January 13, 2017

¹ Faculty Action

Unit Title and Number	Courses (new, revisions, deletions, ACE certification and recertification)	Type of Action Requested	Approved CASNR	Approved CASNR Faculty	Approved UCC	Approved Graduate Council
ASCI 944 - Quantitative Methods for Genomics of Complex Traits	New Course ASCI 944. Quantitative Methods for Genomics of Complex Traits (STAT 844) (3 cr II) Lec 3. Prereq: ASCI 861U, 931, or equivalent; STAT 802, 821, or equivalent Quantitative genetic analysis of complex traits. Quantitative methodologies for connecting phenotypes with high-dimensional genomic information to understand polygenic traits from both prediction and inference perspectives.	1/13/17				
FORS 401 - Forensic Biochemistry	Change of Title FORS 401. Forensic Biology (3 cr II) Lec 3. Prereq: LIFE 120/L and LIFE 121/L, BIOS 205, BIOS 206, and FORS 120/L or instructor permission. Ethics, quality assurance, quality control, analysis, and interpretation of biological evidence for the legal system.	1/13/17				
FORS 401L - Forensic Biochemistry Lab	Change of Title FORS 401L. Forensic Biology Laboratory (1 cr II) Lab 3. Prereq: Parallel FORS 401. FORS 401L is a lab for credit to go with FORS 401.	1/13/17				
FORS 408 - Forensic Y-STR Analysis	Deletion of Course FORS 408. Forensic Y-STR Analysis (1 cr I) Lab 3. Prereq: FORS 401/401H Introduction of forensic Y-STR analysis, from DNA extraction to statistical analysis of results, and trouble-shooting techniques:	1/13/17				
FORS 410 - Advanced Forensic DNA Methods	New Course FORS 410. Advanced Forensic DNA Methods (3 cr I) Lec 3. Prereq: FORS401/401L Provides a comprehensive description of forensic DNA analysis and includes a complete discussion of the process of forensic DNA analysis, from evidence collection to statistical analysis of DNA profiles, including the subjects of DNA extraction, quantitation, PCR amplification, allele detection, PCR artifact identification, and DNA profile interpretation. Particular attention will be given to the areas of mixed profile interpretation and statistical methods.	1/13/17				

<p>FORS 411 - Overview of Forensic Comparative Analysis Lab</p>	<p>Change Semester Offered and Description FORS 411. Overview of Forensic Comparative Analysis Lab (3 cr II) Lab. Prereq: FORS 120/L or equivalent, FORS 302 or FORS 303, LIFE 120/L and LIFE 121/L or equivalent, CHEM 109 or equivalent, ENTO 115/116, STAT 218, and MATH 104 or 106 or instructor permission. <u>Access to a computer, six-inch metric scale marked in millimeters, a digital camera and an inexpensive Venier caliper are required.</u> <u>Covers the main forensic science comparisons that are seen in most crime scene investigation units and forensic science labs: fracture matches/physical matches, fingerprint comparison, questioned document comparison, firearm and related components comparisons, toolmark comparison, questioned document and linguistic comparisons, footwear and tire track comparisons, hairs and fiber comparison, other trace evidence comparisons, pattern injuries to human bodies, and biological comparison.</u> Provides a broad overview of the concepts and analytical techniques of forensic comparative science. Covers basic microscopic applications, photography, computer applications, courtroom testimony, ethics, logic and thought, cognitive bias, and the concepts of error and sufficiency in forensic science.</p>	<p>1/13/17</p>		
<p>NRES 424/824 - Forest Ecology</p>	<p>Change of Prerequisite and Description. Elimination of Lab NRES 424/824. Forest Ecology (# 3 cr II) Lec 3, lab 3. Prereq: NRES/BIOS 220 or BIOS 207 <u>The structure and function of forest ecosystems including their response to global change; emphasis on forest succession and disturbance regimes in order to understand the dynamics of forested landscapes.</u></p>	<p>1/13/17</p>		
<p>STAT 980 - Advanced Probability Theory</p>	<p>Change of Title and Addition of Prerequisite STAT 980 - Advanced Probability Theory I (3 cr) Lec. 3. Prereq: MATH 325, STAT 803. Construction of probability spaces, random variables and expectations, monotone and dominated convergence theorems, Fatou's lemma, modes of convergence, Kolmogorov law of large numbers, central limit theory, conditional probability given a sigma field.</p>	<p>1/13/17</p>		
<p>STAT 981 - Advanced Probability Measures</p>	<p>Change of Title and Description STAT 981. Advanced Probability Theory II (3 cr) Lec 3. Prereq: STAT 980 A continuation of STAT 980 providing depth in profitability theory and stochastic processes. Topics include convergence properties of random variables and treatment of several important stochastic processes.</p>	<p>1/13/17</p>		
<p>STAT 982 - Statistics Theory I</p>	<p>Change of Title, Prerequisite and Description STAT 982 - Advanced Inference. (3 cr) Lec. 3. Prereq: STAT 883 and STAT 980. Uniformly minimum variance unbiased estimators, consistency and asymptotic normality of the maximum likelihood estimator, decision-theoretic Bayes estimation, frequentist testing (likelihood ratio tests, Neyman-Pearson lemma, uniformly most powerful tests), Bayes testing and Bayes factors, nonparametric tests, multiple comparisons procedures.</p>	<p>1/13/17</p>		

STAT 983 - Statistics Theory II	<p>Change of Title, Prerequisites, and Description STAT 983. Statistical Learning (3 cr) Lec 3. Prereq: STAT 823, STAT 833. Model selection including sparsity methods and their oracle properties, information methods, <u>cross-validation</u> and stochastic search. Basic theory of kernel methods for regression. <u>Classification</u>, linear and quadratic discriminants, Bayes classifier, nearest neighbor methods, kernel methods for <u>classification</u>. Introduction to neural networks and recursive partitioning. Model averaging methods and measures of complexity. <u>Cluster analysis</u>.</p>	1/13/17		
STAT 984 - Asymptotics and Applications	<p>Change of Description STAT 984. Asymptotics and Applications (3 cr) Lec 3. Prereq: STAT 980. A continuation of STAT 980 providing breadth in commonly <u>occurring</u> major subfields of statistics that rely heavily on probability theory. <u>Large sample theory estimation, testing, expansion, and convergence in a variety of settings.</u></p>	1/13/17		
VBMS 410 - General Pharmacology and Toxicology	<p>Change of Credit Hours, Prerequisite and Description IS VBMS 410. General Pharmacology and Toxicology (# 3 cr I) Lec 3. Prereq: BIOS 213, ASCI 240, or <u>ASCI 340</u>; BIOC 321 or BIOC/BIOS/CHEM 431/831; or equivalent. Recommended: CHEM 252 and 254; BIOC/BIOS/CHEM 432/832 and 433/833. Basic principles and sciences of drug action (as therapeutic agents) and of adverse (toxic) effects of harmful chemical substances. <u>Discussion</u> of these concepts as they relate to animal production and care, regulatory concerns, legal and ethical decisions, human and animal health hazards, food safety, and environmental contamination.</p>	1/13/17		
Tabled Items				
<p>AGRO 315 - Genetics AGRO 409A/809A - Case Studies in Plant Breeding: Breeding for Disease Resistance AGRO 409B/908B - Case Studies in Plant Breeding: Transgenic Strategies for Disease Resistance AGRO 412/812 - Crop and Weed Genetics FORS 402/802 - Principles of Forensic Photography FORS 406/806 - Crime Scene Management FORS 407/807 - Forensic DNA Analysis</p>				
New degree programs, options, specializations, certificates, minors (undergraduate and graduate)				
None				
Curriculum Committee Approval Only: Substitution/waivers, student appeals, bulletin copy (format, consistency, accuracy, editorial), operating procedures for the curriculum committee				
Reviewed critical requirements for Applied Climate Science				
Informational Items: Tabled items, calendar of meetings and deadlines, changes in membership, program changes in degree program that do not include the college core, ACE assessment reports The				
Approved changing the name of Agronomy and Horticulture's "Organic Option" to "Organic Farming and Food Systems Option"				

¹ If you have specific questions or concerns; please visit with your CASNR Curriculum Committee Representative to discuss the specific agenda item.

Any unit or group of at least five (5) faculty may challenge a decision of the Committee that requires faculty action by filing a written objection. The unit administrator will coordinate the written response to the Dean by January 31, 2017. Unless the concerns can be resolved with clarification, revision and/or withdrawal and re-submission, the matter in question will be brought before the full faculty for discussion, debate and vote. If no written objections are properly filed, the action will be considered approved by the College faculty and either implemented or forwarded to the appropriate University Committee (University Curriculum Committee, Graduate Council and/or Academic Planning Committee) with the faculty recommendation for approval.

² The CASNR Curriculum Committee serves as the Parent Unit for the following degree programs:
B.S. in Applied Science, B.S. in Environmental Studies, B.S. in Forensic Science, B.S. in Integrated Science, B.S. in PGA Golf Management, B.S. in Grassland Studies, Master of Applied Science and Doctor of Plant Health.

The Center for Grassland Studies serves as the hosting unit for the PGA Golf Management Program.



No approval needed