<table>
<thead>
<tr>
<th>Unit Title and Number</th>
<th>Type of Action Requested</th>
<th>Approved CASNR</th>
<th>Approved CASNR Faculty</th>
<th>Approved UCC</th>
<th>Approved Graduate Council</th>
</tr>
</thead>
<tbody>
<tr>
<td>AECN 336 - Grain Merchandising</td>
<td>Change of Prerequisite AECN 336. Grain Merchandising (3 cr I) Lec 3. Prereq: AECN 325 235 Study of grain merchandising concepts, tools, and strategies as they relate to grain buyers. Focus on integration of topics from this course and AECN 325 235 to help students understand how grain is traded from the perspective of the grain buyer.</td>
<td>10/27/17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AECN 897 - Masters Project</td>
<td>New Course AGEN 897. Masters Project (BSEN 897, MSYM 897) (3-6 cr, 6 cr per sem, max 6) Ind. Prereq: Admission to M.S. in Agricultural and Biological Systems Engineering or M.S. in Mechanized Systems Management, and permission of major advisor Intended for students who are pursuing an Option II or III master's degree in Agricultural and Biological Systems Engineering, or Mechanized Systems Management. Conception, design, development, and completion of a project that requires data collection, synthesis, analysis of results, and the development of a final written report that will be defended in the final oral examination.</td>
<td>10/27/17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGRO 216 - Plant Breeding Principles and Practice</td>
<td>Delete BIOS Crosslisting AGRO 216. Plant Breeding Principles and Practice (BIOS 216, HORT 216) (2 cr) Lec 2. Prereq: High school biology and chemistry. BIOS 101 and 101L, or 102 or equivalent recommended. Plant breeding theory and technique. Application of genetic principles to plant improvement. Experience with breeding agronomic and horticultural plant species to illustrate plant mating systems and breeding principles.</td>
<td>10/27/17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGRO 420/820 - Bioinformatics Applications in Ag.</td>
<td>New Course AGRO 420/820. Bioinformatics Applications in Agriculture (3 cr I) Lec 3. Prereq: AGRO 215 Genetics or equivalent. Undergraduate students must be at the senior class level standing. Introduction to applied computational methods to analyze biological data, efficiently manipulate large data sets, and automate workflows using Perl and Shell scripting. Learn strategies for assembling and analyzing data generated by modern high throughput sequencing platforms.</td>
<td>10/27/17</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGRO 807</td>
<td>Plant-Water Relations</td>
<td>Quantitative study of water relations in the soil-plant-atmosphere system. Basic physical processes, which describe the movement of water in the soil and the atmosphere, and the physiological processes, which describe water movement inside of the plant. Stomata physiology and the effects of internal water deficits on photosynthesis, respiration, nitrogen metabolism, cell division and cell enlargement. Results from integrative models used to study the relative importance of environmental versus physiological factors for several plant-environment systems.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AGRO 810</td>
<td>Plant Molecular Biology</td>
<td>Molecular genetic basis of biological function in higher plants. Genome organization, gene structure and function, regulation of gene expression, recombinant DNA, and genetic engineering principles. Material taken primarily from current literature.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALEC 337</td>
<td>Instructional Internship in Leadership Development</td>
<td>A structured professional and personal leadership developmental experience by providing planning, facilitation, instruction, and evaluation assistance in leadership and communication courses.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALEC 809</td>
<td>Diffusion of Innovations: Through an Extension Context</td>
<td>A change agent influences innovative decisions in a direction deemed desirable by a business, agency, or organization. Overview of key characteristics of change agents as well as processes by which they influence the introduction, adoption, and diffusion of technological changes in society. Prepares those who are responsible for bringing about change in their community and within the Extension system.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ALEC 995</td>
<td>Doctoral Seminar in Leadership Studies</td>
<td>Outcome-based scholarly activity approved in consultation with doctoral advisor. While working on either an individualized or small group basis, develop, execute, and report one or more projects addressing the interaction between research and practice in the field of leadership.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Change of Prerequisites</td>
<td>New Course</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------------------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ASCI 340 - Animal Physiological Systems</td>
<td></td>
<td>Change of Prerequisites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ASCI 340. Animal Physiological Systems (4 cr I) Lec 3, lab 2. Prereq: LIFE 120/121, CHEM 109/110, MATH 102, 103, 104, or 106. A comprehensive look at the major physiological systems that comprise the mammalian body. Anatomical organization and functionality of the nervous system, muscle, cardiovascular system, respiratory system, digestive system, urinary system, reproductive system, endocrine system, and immune system. Labs offer hands-on learning experiences through dissections, clinical demonstrations, and interactive multimedia.</td>
<td></td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BSEN 260 - Instrumentation I for Agricultural and Biological Systems Engineering</td>
<td></td>
<td>New Course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSEN 260. Instrumentation I for Agricultural and Biological Systems Engineering (AGEN 260) (3 cr II) Lec 2, lab 2. Prereq: MATH 221 or parallel developing concepts in instrumentation relevant to agricultural and biological systems. Fundamental concepts of charge, current, voltage, impedance, power, and circuit analysis within the context of biological engineering. Introduction to sensors and their applications. Data collection using modern acquisition hardware and software. Electrical safety and effects of electricity on the human body.</td>
<td></td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENTO 411/811 - Field Entomology</td>
<td></td>
<td>Change of Number to 482/882</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENTO 482/882. Field Entomology (BIOS 482/882) (4 cr III) Lec 3, lab 3. Prereq: 12 hrs biological sciences. Offered only at Cedar Point Biological Station. Field course in insect taxonomy and biology emphasizing field collection, specimen preparation, classification, and insect natural history.</td>
<td></td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FORS 411 - Overview of Forensic Comparative Analysis</td>
<td></td>
<td>Change of Prerequisites</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>FORS 411. Overview of Forensic Comparative Analysis (3 cr II) Lec, 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. Prereq: FORS 120/L; LIFE 120/L; FORS 302 or FORS 403; CHEM 109; and STAT 218. Covers the main forensic science comparisons that are seen in most crime scene investigation units and forensic science labs. Provides a broad overview of the concepts and analytical techniques of forensic comparative science. Covers basic microscopic applications, photography, computer applications, courtroom testimony, ethics, cognitive bias, and the concepts of error and sufficiency in forensic science.</td>
<td></td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 201 - Dendrology: Study and Identification of Trees and Shrubs</td>
<td></td>
<td>New Course</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NRES 201. Dendrology: Study and Identification of Trees and Shrubs (HORT 201) (3 cr I) Lec 2, lab 3. An introduction to the naming, identification, and natural history of woody trees and shrubs in North American with emphasis on trees common to Nebraska. Covers morphology, natural site conditions, wildlife and human uses of woody trees and shrubs.</td>
<td></td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Prerequisites and Notes</td>
<td>Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>------------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 220</td>
<td>Principles of Ecology</td>
<td>Removable BIOS Cross-listing and Change of Prerequisite</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>NRES 220. Principles of Ecology (BIOS 220) (3 cr) Lec 3. Prereq: LIFE 121 or BIOS 101 or HORT 131; 3 hours MATH. NRES 220 is not open to students who have completed BIOS 207. NRES 220 will not count toward a major in BIOS. MATH 100A is not sufficient preparation. Ecology as a quantitative discipline that integrates the life and earth sciences to understand the dynamics of natural and managed ecosystems.</td>
<td></td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 222</td>
<td>Ecology Laboratory (ES) NRES 222. Ecology Laboratory (BIOS 222) (1 cr) Lab 4. Prereq: NRES/BIOS 220 or parallel. May also be offered at Cedar Point Biological Station. Field trips to local ecosystems are required. Field and laboratory experiments in terrestrial and aquatic ecology.</td>
<td></td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 302</td>
<td>Tree Biology</td>
<td>New Course, NRES 302. Tree Biology (HORT 302) (3 cr Lec 3. Prereq: BIOS 101, LIFE 120, HORT 131 or permission The study of the structure and function of woody plants, with a focus on trees growing in temperate climates. Covers the basics of wood physiology in terms of the biological, physical, and chemical processes utilized by tree to function. The anatomy and morphology of trees with a focus on the impacts of tree maintenance to the structure and function of landscape trees.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 321</td>
<td>Arboriculture: Maintenance &amp; Selection of Landscape Trees</td>
<td>New Course, NRES 321. Arboriculture: Maintenance &amp; Selection of Landscape Trees (HORT 321) (4 cr II Lec 3, Lab 3. Prereq: Junior standing or permission Covers practical application of the science of tree growth, development, and management in human dominated landscapes. Tree selection for varying landscapes and objectives, proper planting and pruning, identification and correction of tree defects, and working with tree pest issues.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 437</td>
<td>Green Space and Urban Forestry Management (ACE 10) NRES 437/837. Green Space and Urban Forestry Management (HORT 437) (3 cr Lec 3. Prereq: Junior or senior standing, Graduate student or permission A focus on the management of trees, parks, and green infrastructure in rural and urban communities. Perspectives from community planning, landscape architecture, urban forestry, natural resources, horticulture, and environmental policy. Development and implementation of green space and forest management plans encompassing societal needs and biological limitations in rural and urban communities.</td>
<td></td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Course Description</td>
<td>Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>--------------------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 482/882 - Ecophysiology of Wildlife</td>
<td>New Course</td>
<td>New Course NRES 482/882. Ecophysiology of Wildlife (3 cr l) Lec 3. Prereq: NRES220 or BIOS207; AGRO215/BIOS206; BIOS386 Evaluation of the conserved physiological principles that are broadly used across animal groups, as well as the many unique adaptations used by specific taxa. Focuses on all major vertebrate groups, including fish, birds, mammals, reptiles and amphibians, and links the physiological mechanisms that allow them to survive to the environments in which they live. Highlights methods scientists use to gather physiological information, and the ways in this information can be used by scientists in a variety of different fields.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>NRES 800 - Sampling, Data Management and Visualization</td>
<td>Change of Credit Hours and Addition of Prerequisite</td>
<td>Change of Credit Hours and Addition of Prerequisite NRES 800. Sampling, Data Management and Visualization (+ 3 cr) Lab 3. Prereq: Graduate standing is required Implement best practices for scientific computing. Practice with a scientific workflow from the design of the sampling scheme, through generation of the data in the field or lab, up to the point of analysis. Understand cognitive constraints on visualization. Use modern software tools to produce publication quality data visualizations.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGAM 101 - Introduction to PGA Golf Management 2.0</td>
<td>Change of Title, Note and Description</td>
<td>Change of Title, Note and Description PGAM 101. Introduction to PGA Golf Management 3.0 (3 cr I) Lec 2, rec 1. Prereq: Acceptance into the PGA Golf Management Program (PGAM). This course is a prerequisite for PGAM 112. PGAM 295 and/or PGAM 495 Introduction to PGA Golf Management (PGAM) curriculum and program including an overview of PGA of America 3.0 curriculum and testing procedures and the PGAM policies and procedures. PGA 3.0 curriculum modules include the Qualifying Level and Business Planning. Preparation for standardized PGA testing for PGA 3.0 Qualifying Level and Level 1.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGAM 112 - PGA Golf Management 2.0, Level 1-A</td>
<td>Change of Title and Reference in Description</td>
<td>Change of Title and Reference in Description PGAM 112. PGA Golf Management 3.0 Level 1-A (3 cr II) Lec. Prereq: PGAM 101. Additional learning objectives and modules from the PGA 3.0 Level 1 curriculum. Preparation for standardized PGA testing for PGA 3.0 Level 1.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGAM 201 - PGA Golf Management 2.0 Level 1-B</td>
<td>Change of Title and Description</td>
<td>Change of Title and Description PGAM 201. PGA Golf Management 3.0 Level 1-B (3 cr I) Lec 2, rec 1. Prereq: PGAM 112. Continuation of PGA 3.0 Level 1 curriculum modules. Curriculum modules covered will include Customer Relations, Golf Car Fleet, Management and the PGA Introduction to Teaching and Club Performance. Students will attend a 2.5 day PGA 3.0 seminar provided by the PGA of America. Standardized PGA testing for PGA 3.0 Level 1.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGAM 212 - PGA Golf Management 2.0 Level 2-A</td>
<td>Change of Title and Description</td>
<td>Change of Title and Description PGAM 212. PGA Golf Management 3.0 Level 2-A (3 cr II) Lec. Prereq: PGAM 201. Additional learning objectives and modules from the PGA 3.0 Level 2 curriculum. Preparation for standardized PGA testing for PGA 3.0 Level 2 module(s). Preparation for the next internship.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Title</td>
<td>Description</td>
<td>Date</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------</td>
<td>--------------</td>
<td>-------------</td>
<td>------</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGAM 301 - PGA Golf Management 2.0 Level 2-B</td>
<td>Change of Title and Description</td>
<td>Change of Title and Description. PGAM 301. PGA Golf Management 3.0 Level 2-B (3 cr II) Lec 3. Continuation of PGA 3.0 Level 2 curriculum modules. Additional learning objectives and modules from the PGA 3.0 curriculum. In addition, students will attend a 2.5 day PGA sponsored seminar provided by the PGA of America. Preparation for standardized PGA testing for PGA 3.0 Level 2 module(s). Preparation for the next internship.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGAM 312 - PGA Golf Management 2.0 Level 3-A</td>
<td>Change of Title and Description</td>
<td>Change of Title and Description. PGAM 312. PGA Golf Management 3.0 Level 3-A (3 cr I) Lec, rct. Prereq: PGAM 301. Additional learning objectives and modules from the PGA 3.0 Level 3 curriculum. Preparation for standardized PGA testing for PGA 3.0 Level 3 module(s).</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>PGAM 401 - PGA Golf Management 2.0 Level 3-B</td>
<td>Change of Title and Reference in Description</td>
<td>Change of Title and Reference in Description. PGAM 401. PGA Golf Management 3.0 Level 3-B (3 cr) Lec 2, rct 1, Lec 3. Continuation of PGA 3.0 Level 3 curriculum modules. Curriculum modules covered will include Advanced Teaching and Club Fitting, Player Development Programs and Teaching as a Business, Food and Beverage, and Career Enhancement/Final Experience. Students will attend a 2.5 day PGA sponsored seminar on Advanced Teaching and Club Fitting. Standardized tests on the modules covered will be administered during the semester.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>TLMT 395 - Career Experience</td>
<td>New Course in CREQ</td>
<td>TLMT 395. Career Experience (1-5 cr, 5 cr per sem, max 5) Fld. Prereq: Sophomore standing and TLMT 227 or TLMT 228; advance approval required. Pass/No Pass only Participation in a turfgrass or landscape management enterprise other than one in which the student has had previous experience. Written and oral reports are required at the completion of the career experience.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VMED 645 - Animal Physiology I</td>
<td>Delete BIOS Crosslisting</td>
<td>VMED 645. Animal Physiology I (ASCI 845, BIOS 843, VBMS 845) (4 cr I) Lec 3, lab 3. Prereq: For ASCI/VBMS 845: Undergraduate courses in biochemistry, biology and physiology. For VMED 645: First year standing in and admission to VMED. Primarily for students in animal or biological sciences or veterinary medicine. Mammalian physiology and cellular mechanisms. Physiology of the cell, embryology, and neuro-sensory, neuromuscular, endocrine, and reproductive systems.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
<tr>
<td>VMED 646 - Animal Physiology II</td>
<td>Delete BIOS Crosslisting</td>
<td>VMED 646. Animal Physiology II (ASCI 846, BIOS 844, VBMS 846) (4 cr II) Lec 3, lab 3. Prereq: For ASCI/VBMS 846: ASCI/VBMS 845. For VMED 646: First year standing in and admission to VMED. ASCI/VBMS 846/VMED 646 is designed for students in animal or biological sciences or veterinary medicine. Mammalian physiology and cellular mechanisms. Physiology of the digestive, cardiovascular, respiratory, and renal systems.</td>
<td>10/27/17</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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

None

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

None

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 November 10, 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:

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

No approval needed

.Carol Shares\CURRICUL\Actions\Summary 10 27 17