

## NCTA/CASNR Reverse Transfer Protocol 7/19/2019

The purpose of this initiative is to increase credential attainment for students attending CASNR who plan to leave the University before completing their bachelor degree

The program has three requirements: **Associate of Science General Education Core Courses** (26 credit hours required), **Specialization core courses** (24-27 SCH), and **Advisor guided electives** (11 SCH). A minimum of 15 credits must be taken directly from NCTA.

### Program requirements:

1. **Associate of Science General Education Core (26 credit hours required):** All options for the AS degree require 26 credit hours of general education broken down according to the outline below. The UNL ACE categories are listed here. The specific courses which meet this requirement are listed in **Appendix A**.
  - a. ACE 1: Written communication; critical thinking (3 hours required)
  - b. ACE 2: Oral communication (3 hours required)
  - c. ACE 3: Quantitative literacy (5 hours required)
  - d. ACE 4: Problem solving (8 hours required)
  - e. ACE 9: Intercultural knowledge & competence (3 hours required)
  - f. ACE 8: Information literacy (1 hours required)
  - g. ACE 8: Civic engagement (3 hour required)
2. **Specialization core courses (24 to 27 credit hours required):** Students would specialize in one of six options. Specific courses needed to meet these specialization core requirements are listed in **Appendix A**.
3. **Advisor guided electives (11-14 credit hours required).**
4. **Courses taught directly by NCTA (15 credit hours required).** These hours could be completed through a combination of any of the following:
  - a. Courses or programs currently offered through NCTA. These credits may also meet the requirements of the specialization core courses or the advisor guided electives.
  - b. Internships, independent study, practicum, or online courses offered by NCTA.

**Table 1.** Summary of credit requirements for the Associate of Science reverse transfer pathway initiative

| AS Option                            | Gen. Ed. SCH | Elect. SCH | Tech. SCH | Total SCH | NCTA origin SCH | CASNR credits approved @ NCTA |
|--------------------------------------|--------------|------------|-----------|-----------|-----------------|-------------------------------|
| <b>Agribusiness Management</b>       | 26           | 11         | 27        | 64        | 15              | 81                            |
| <b>Agronomy</b>                      | 26           | 14         | 24        | 64        | 15              | 42                            |
| <b>Mechanized Systems Management</b> | 26           | 9          | 29        | 64        | 15              | 42                            |
| <b>Agricultural Education</b>        | 26           | 11         | 27        | 64        | 15              | 45                            |
| <b>Animal Science</b>                | 26           | 11         | 27        | 64        | 15              | 84                            |

Table 1 lists the five options in the Associate of Science degree program proposed for the reverse transfer program. The Associate of Science (AS) degree is NCTA's transfer option for students intending to complete a baccalaureate degree. Associate of Science programs were approved for this initiative only if the NCTA faculty could align the learning outcomes in NCTA courses with approved equivalencies offered through UNL. In some program areas, such as veterinary

technology, courses were not available at UNL that aligned with the Associate of Science program area so the program was not proposed.

Total credit hour requirements for the Associate of Science degree range from 61 to 66. Credits are required in four categories:

1. Approximately 40% of the required credits are in general education. Specific UNL courses have been approved in each ACE category.
2. Approximately 20% of the required credits are electives, allowing students to specialize in an area of career interest.
3. Approximately 40% of the required credits are in specified technical courses. Depending on the option, required credits in specific technical courses range from 24 to 29.
4. Fifteen credit hours must be taught by NCTA faculty. The 15 credit hours may fit in any of the categories mentioned above.

**APPENDIX A: Listed below are CASNR courses whose learning outcomes have been approved by the NCTA faculty to meet NCTA degree requirements through reverse transfer from CASNR to NCTA.**

**GENERAL EDUCATION REQUIREMENTS**

**NCTA A.S. Degree Requirement: Written Communication & Critical Thinking (3 Hours Required)**

Acceptable UNL Equivalent Courses - ACE 1: Write texts, in various forms, with an identified purpose, that respond to specific audience needs, integrate research or existing knowledge, and use applicable documentation and appropriate conventions of format and structure.

|          |                                                      |
|----------|------------------------------------------------------|
| ADPR 221 | Strategic Writing for Advertising & Public Relations |
| BSAD 220 | Business Writing                                     |
| ENGL 150 | Writing and Inquiry                                  |
| ENGL 151 | Writing and Argument                                 |
| ENGL 254 | Writing and Communities                              |
| JGEN 120 | Basic Business Communication                         |
| JGEN 200 | Technical Communication I                            |
| JGEN 300 | Technical Communication II                           |
| JOUR 202 | Reporting I                                          |

**NCTA A.S. Degree Requirement: Oral Communication (3 Hours Required)**

Acceptable UNL Equivalent Courses - ACE 2: Demonstrate competence in communication skills in one or more of the following ways:

- by making oral presentations with supporting materials,
- by leading and participating in problem-solving teams,
- by employing communication skills for developing and maintaining professional and personal relationships, or
- by producing and/or interpreting visual information

|          |                                              |
|----------|----------------------------------------------|
| ALEC 102 | Interpersonal Skills for Leadership          |
| COMM 101 | Communication in the 21st Century            |
| COMM 109 | Fundamentals of Human Communication          |
| COMM 209 | Public Speaking                              |
| COMM 210 | Communicating in Small Groups                |
| COMM 215 | Visual Communication                         |
| COMM 283 | Interpersonal Communication                  |
| COMM 295 | University Speech and Debate                 |
| COMM 286 | Business and Professional Communication      |
| ENGR 100 | Interpersonal Skills for Engineering Leaders |
| MRKT 257 | Sales Communication                          |
| NRES 301 | Environmental Communication Skills           |

**NCTA A.S. Degree Requirement: Quantitative Literacy (5 Hours Required)**

Acceptable UNL Equivalent Courses - ACE 3: Use mathematical, computational, statistical, logical, or other formal reasoning to solve problems, draw inferences, justify conclusions, and determine reasonableness.

|          |                                                             |
|----------|-------------------------------------------------------------|
| CRIM 300 | Applied Statistics and Data Processing in the Public Sector |
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|-----------|-----------------------------------------------------------------------|
| CSCE 101  | Fundamentals of Computer Science                                      |
| CSCE 155A | Computer Science I                                                    |
| CSCE 155E | Computer Science I: Systems Engineering Focus                         |
| CSCE 155N | Computer Science I: Engineering and Science Focus                     |
| CSCE 155T | Computer Science I: Informatics Focus                                 |
| ECON 215  | Statistics                                                            |
| EDPS 330  | Statistics and Measurement in Nutrition, Fitness and Health Promotion |
| EDPS 459  | Statistical Methods                                                   |
| ENGL 279  | Digital Literary Analysis                                             |
| MATH 10   | Applied Calculus                                                      |
| MATH 106  | Calculus I                                                            |
| MATH 107  | Calculus II                                                           |
| MATH 107R | Analytic Geometry and Calculus II                                     |
| MATH 203  | Contemporary Mathematics                                              |
| MATH 203J | Contemporary Math                                                     |
| MATH 208  | Calculus III                                                          |
| MATH 221  | Differential Equations                                                |
| MATH 310  | Introduction to Modern Algebra                                        |
| MATH 314  | Linear Algebra                                                        |
| MATH 325  | Elementary Analysis                                                   |
| SCMA 250  | Business Programming                                                  |
| PHIL 110  | Introduction to Logic and Critical Thinking                           |
| PHIL 211  | Introduction to Modern Logic                                          |
| SOCI 206  | Introduction to Social Research II                                    |
| STAT 218  | Introduction to Statistics                                            |
| STAT 380  | Statistics and Applications (MATH 380)                                |

**NCTA A.S. Degree Requirement: Problem Solving (8 Hours Required)**

Acceptable UNL Equivalent Courses - ACE 4: Use scientific methods and knowledge to pose questions, frame hypotheses, interpret data, and evaluate whether conclusions about the natural and physical world are reasonable.

|          |                                             |
|----------|---------------------------------------------|
| AGRI 115 | Biotechnology: Food, Health and Environment |
| AGRO 131 | Plant Science (HORT 131)                    |
| ANTH 142 | Basics of Biological Anthropology           |
| ANTH 232 | Introduction to Archaeology                 |
| ANTH 242 | Introduction to Biological Anthropology     |
| ANTH 374 | Primate Behavior and Ecology                |
| ASTR 103 | Descriptive Astronomy                       |
| ASTR 103 | Life in the Universe (BIOS 117, GEOL 117)   |
| ASTR 20  | Introduction to Astronomy and Astrophysics  |
| BIOS 101 | General Biology                             |
| BIOS 110 | Human Biology                               |
| CHEM 105 | Chemistry in Context I                      |
| CHEM 109 | General Chemistry I                         |
| CHEM 110 | General Chemistry II                        |
| CHEM 113 | Fundamental Chemistry I                     |
| ENTO 115 | Insect Biology (BIOS 115)                   |
| FDST 131 | The Science of Food (CHEM 131, NUTR 131)    |
| FDST 301 | Chemistry of Food                           |
| GEOG 155 | Elements of Physical Geography              |
| GEOG 271 | Geography of the United States              |
| GEOL 100 | Introduction to Geology                     |
| GEOL 101 | Dynamic Earth                               |
| GEOL 103 | Evolution of the Earth                      |

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| GEOL 105 | Dinosaurs and the History of Life                          |
| GEOL 106 | Environmental Geology                                      |
| GEOL 109 | Oceanography                                               |
| GEOL 110 | Deadly Planet                                              |
| GEOL 115 | The Earth's Energy Resources                               |
| GEOL 120 | Geology of National Parks and Monuments                    |
| GEOL 125 | Frontiers in Antarctic Geosciences                         |
| HORT 100 | Plants, Landscapes, & the Environment (AGRO 100, TLMT 100) |
| LIFE 120 | Fundamentals of Biology I                                  |
| LIFE 121 | Fundamentals of Biology II                                 |
| METR 140 | Severe and Unusual Weather                                 |
| METR 180 | Environment, Energy, and Climate Change                    |
| METR 100 | Weather and Climate                                        |
| MSYM 109 | Physical Principles in Agriculture and Life Sciences       |
| NRES 108 | Earth's Natural Resource Systems Laboratory                |
| PHYS 115 | Descriptive Physics                                        |
| PHYS 141 | Elementary General Physics I                               |
| PHYS 142 | Elementary General Physics II                              |
| PHYS 151 | Elements of Physics                                        |
| PHYS 211 | General Physics I                                          |
| PHYS 212 | General Physics II                                         |
| PHYS 260 | Liberal Arts Physics: Matter and Motion                    |
| PHYS 261 | Liberal Arts Physics: Atoms and Fields                     |
| PLPT 110 | Molds and Man                                              |
| POLS 250 | Genetics, Brains, and Politics                             |
| PSYC 273 | Brain & Behavior                                           |
| SCIL 109 | Water in Society (AECN 109, ENVR 109, GEOG 109, NRES 109)  |
| TMFD 206 | Textiles                                                   |

### **NCTA A.S. Degree Requirement: Intercultural Knowledge & Competence (3 Hours Required)**

Acceptable UNL Equivalent Courses - ACE 9: Exhibit global awareness or knowledge of human diversity through analysis of an issue.

|           |                                                                                                |
|-----------|------------------------------------------------------------------------------------------------|
| ADPR 438: | Global Advertising                                                                             |
| ADPR 480: | Japanese Visual Culture in Context (ARTP 480/880)                                              |
| AECN 346: | World Food Economics                                                                           |
| AECN 367: | Agricultural Development in Developing Countries                                               |
| AECN 420: | International Food and Agricultural Trade                                                      |
| AECN 425: | Agricultural Marketing in a Multinational Environment                                          |
| AGRI 282: | Introduction to Global Agricultural and Natural Resources Issues                               |
| AGRI 310: | Study Tours in International Agriculture                                                       |
| AGRO 107: | Invasive Plant Species: Impacts on Ecosystems (NRES 107)                                       |
| AHIS 160: | Introduction to Asian Art                                                                      |
| AHIS 206: | Art of Ancient Egypt & Mesopotamia (ANTH 206, CLAS 206)                                        |
| ANTH 110: | Introduction to Anthropology                                                                   |
| ANTH 237: | Ancient Mesoamerica (ETHN 237, LAMS 237)                                                       |
| ANTH 252: | World Archaeology, Global Heritage (CLAS 252)                                                  |
| ANTH 386: | Digital Heritage Tools                                                                         |
| ANTH 442: | Human Variation                                                                                |
| ARAB 288: | Exploring Love, Sexuality and Femininity in the History of Arabic Culture (RELG 288, WMNS 288) |
| ARAB 306: | Women in Quran (MRST 306, RELG 306, WMNS 306)                                                  |
| BSAD 320: | Global Issues                                                                                  |
| BSAD 420: | Global Leadership and the Culture Map                                                          |

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| CLAS 183:  | Heroes, Wives, and Slaves (HIST 183)                               |
| COMM 211:  | Intercultural Communication (ETHN 211)                             |
| CRIM 338:  | Race, Ethnicity and Criminal Justice                               |
| CYAF 495:  | Special Topics in Family and Cultural Diversity                    |
| ECON 321:  | Introduction to International Economics                            |
| EDPS 121:  | U.S. Education in the Age of Globalization (CYAF 121)              |
| ENGL 212:  | Introduction to LGBTQ Literature (WMNS 212)                        |
| ENG 215:   | Introduction to Women's Literature (WMNS 215)                      |
| ENG 242:   | Global Literatures since 1850 (GLST 242)                           |
| ENGL 244:  | African American Literature since 1865 (ETHN 244)                  |
| ENGL 244A: | Introduction to African Literature (ETHN 244A)                     |
| ENGL 344B: | Black Women Authors (ETHN 344B, WMNS 344B)                         |
| ENGL 344D: | Caribbean Literature (ETHN 344D)                                   |
| ENGL 244E: | African American Literature before 1865 (ETHN 244E)                |
| ENGL 245A: | Introduction to Asian American Literature (ETHN 245A)              |
| ENGL 245N: | Introduction to Native American Literature (ETHN 245N)             |
| ENGL 345D: | Chicana and/or Chicano Literature (ETHN 345D)                      |
| ENGL 245J: | Jewish-American Literature (JUDS 245J)                             |
| ENGL 345N: | Native American Women Writers (ETHN 345N, WMNS 345N)               |
| ENGL 312:  | LGBTQ Literature and Film (WMNS 312)                               |
| ENGL 315A: | Survey of Women's Literature (WMNS 315A)                           |
| ENGL 315B: | Women in Popular Culture (WMNS 315B)                               |
| ENGL 346:  | Cuban-American Literature (ETHN 346)                               |
| ENGL 376:  | Rhetoric: Argument and Society                                     |
| ENGR 200:  | Professionalism and Global Perspective                             |
| ENGR 490:  | Global Experiences in Engineering                                  |
| ENSC 110:  | Energy in Perspective                                              |
| ENVR 249:  | Individual and Cultural Perspectives on the Environment (NRES 249) |
| ETHN 100:  | Introduction to Ethnic Studies                                     |
| ETHN 200:  | Introduction to African American Studies                           |
| ETHN 201:  | Introduction to Native American Studies                            |
| ETHN 202:  | Introduction to Latina and/or Latino Studies                       |
| ETHN 203:  | Introduction to Africa                                             |
| GEOG 140:  | Introductory Human Geography                                       |
| GEOG 181:  | Quality of the Environment                                         |
| GEOG 272:  | Geography of World Regions                                         |
| GEOG 378:  | Geography of Latin America                                         |
| GEO 380:   | Geography of Africa (ETHN 380, NRES 380)                           |
| GEOL 125:  | Frontiers in Antarctic Geosciences                                 |
| GPSP 377:  | Women of the Great Plains (GEOG 377, WMNS 377)                     |
| GPSP 378:  | Cultural Encounters on the Great Plains (COMM 378)                 |
| HIST 113:  | History of Hip Hop (ETHN 113)                                      |
| HIST 114:  | History of Modern Crime                                            |
| HIST 120:  | World History to 1500 CE                                           |
| HIST 121:  | World History Since 1500 CE                                        |
| HIST 150:  | African Culture and Civilization (ETHN 150)                        |
| HIST 171:  | History of Latin America (ETHN 171)                                |
| HIST 181:  | Introduction to East Asian Civilization (POLA 171)                 |
| HIST 217:  | Israel: The Holy Land (JUDS 217, RELG 217)                         |
| HIST 214:  | History of Islam (RELG 214)                                        |
| HIST 219:  | Introduction to Jewish History (JUDS 219, RELG 219)                |
| HIST 225:  | Women in History (WMNS 225)                                        |
| HIST 241:  | Native American History (ETHN 241)                                 |
| HIST 358:  | Native American Women (ETHN 358, WMNS 358)                         |
| HIST 247:  | African American History: After 1877 (ETHN 247)                    |
| HIST 251:  | North American West: Borders, Nations, & Peoples                   |

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| HIST 282: | Modern East Asia                                                              |
| HIST 285: | Africa Since 1800 (ETHN 285)                                                  |
| HORT 200: | Landscape and Environmental Appreciation (GEOG 200, LARC 200)                 |
| JOMC 222: | Social Justice, Human Rights and the Media                                    |
| JOMC 380: | Global News in the Age of Social Media                                        |
| MNGT 365: | Managing Diversity in Organizations                                           |
| MNGT 414: | Leadership in a Global Context                                                |
| MODL 383: | Women Write the World (ENGL 383, GLST 383, WMNS 383)                          |
| MUSC 280: | World Music (MUNM 280)                                                        |
| NRES 104: | Climate in Crisis                                                             |
| NRES 494: | International Study Tours in Natural Resource Management                      |
| NUTR 253: | Cultural Aspects of Food and Nutrition                                        |
| PHIL 106: | Philosophy and Current Issues                                                 |
| PHIL 218: | Philosophy of Feminism                                                        |
| PHIL 225: | Environmental Ethics                                                          |
| PHIL 265: | Philosophy of Religion                                                        |
| PHIL 325: | Advanced Social Political Philosophy                                          |
| POLS 160: | International Relations (GLST 160)                                            |
| POLS 238: | Blacks and the American Political System (ETHN 238)                           |
| POLS 333: | Immigration and Politics (ETHN 333)                                           |
| POLS 375: | Conflict and Development in Africa (ETHN 375)                                 |
| PSYC 330: | Psychology of Diversity                                                       |
| RELG 108: | World Religions                                                               |
| RELG 118: | Introduction to Hinduism, Buddhism, and Daoism                                |
| RELG 134: | Religious Diversity in America (HIST 134)                                     |
| RELG 181: | Judaism, Christianity and Islam                                               |
| RELG 208: | Introduction to Islam                                                         |
| RELG 209: | Judaism and Christianity in Conflict and Coexistence (JUDS 209)               |
| RELG 215: | Religion and Culture Before 1000 C.E.                                         |
| RELG 218: | Buddhism                                                                      |
| RELG 226: | The History of African-American Religious Experience (HIST 226)               |
| RELG 230: | Tibetan Buddhism                                                              |
| SLPA 488: | Linguistic Needs of Bilingual and Culturally Different Students               |
| SOCI 200: | Gender in Contemporary Society (WMNS 200)                                     |
| SOCI 201: | Social Problems                                                               |
| SOCI 217: | Sociology of Race and Ethnicity (ETHN 217)                                    |
| SOCI 226: | Families and Society (WMNS 226)                                               |
| SPAN 321: | Exploring Hispanic Culture: Spain                                             |
| SPAN 331: | Latin American Civilization (LAMS 331)                                        |
| TEAC 330: | Multicultural Education (ETHN 330)                                            |
| TMFD 123: | Clothing and Society: You Are What You Wear                                   |
| WMNS 101: | Introduction to Women's and Gender Studies                                    |
| WMNS 201: | Introduction to Lesbian, Gay, Bisexual, Trans-gender, Queer/Sexuality Studies |
| WMNS 250: | Sex and Gender Around the Globe                                               |
| WMNS 385: | Women, Gender and Science                                                     |

### **NCTA A.S. Degree Requirement: Civic Engagement (3 Hours Required)**

Acceptable UNL Equivalent Courses - ACE 8: Use knowledge, theories, and analysis to explain ethical principles and their importance in society.

|           |                                                              |
|-----------|--------------------------------------------------------------|
| AECN 445: | Agricultural and Natural Resource Policy Analysis (NREE 445) |
| ALEC 125: | Land, Food and People                                        |
| ALEC 165: | Pepsi Service Scholars                                       |
| ALEC 388: | Ethics in Agriculture and Natural Resources (AECN 388)       |

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| ANTH 332:  | Archaeological Collections and Collections Management     |
| ANTH 352:  | Indigenous Peoples of the Great Plains (ETHN 352)         |
| ARCH 107:  | Sustainability Basics and the Build Environment           |
| BIOS 232:  | Ecological Issues in the Great Plains                     |
| BLAW 300:  | Business, Government & Society                            |
| CLAS 222:  | Sparta                                                    |
| CNST 420:  | Professional Practice and Ethics                          |
| COMM 220:  | Public Advocacy and Civic Engagement                      |
| COMM 375:  | Theories of Persuasion                                    |
| CONE 206:  | Engineering Economics (BSEN 206)                          |
| CRPL 400:  | Introduction to Planning                                  |
| CSCE 486:  | Computer Science Professional Development                 |
| CSCE 488:  | Computer Engineering Professional Development             |
| CYAF 150:  | Life Skills for Success                                   |
| CYAF 460:  | Human Dimensions of Sustainability                        |
| ECON 200:  | Economic Essentials and Issues                            |
| ECON 211:  | Principles of Macroeconomics                              |
| ECON 212:  | Principles of Microeconomics                              |
| ENGL 210P: | Literature of War and Peace                               |
| ENGL 275:  | Introduction to Rhetorical Theory                         |
| ENGL 376:  | Rhetoric: Argument and Society                            |
| ENGR 320:  | Leadership, Management and Ethics                         |
| ENGR 469:  | Technology, Science and Civilization                      |
| ENVR 201:  | Science, Systems, Environment and Sustainability          |
| ETHN 100:  | Introduction to Ethnic Studies                            |
| ETHN 200:  | Introduction to African American Studies                  |
| ETHN 201:  | Introduction to Native American Studies                   |
| HIST 115:  | Making & Breaking Law in US History                       |
| HIST 243:  | Early America to 1800                                     |
| HIST 244:  | 19th Century America                                      |
| HIST 245:  | Modern America Since 1900                                 |
| HIST 265:  | The Global History of American Capitalism                 |
| JOMC 222:  | Social Justice, Human Rights and the Media                |
| JOMC 487:  | Mass Media and Society                                    |
| MUNM 386:  | History of Rock and Roll: Classic Artists (MUSC 386)      |
| NAVS 401:  | Naval Leadership and Management                           |
| NRES 330:  | Environmental Health (NUTR 330)                           |
| PHIL 101:  | Introduction to Philosophy                                |
| PHIL 105:  | The Philosophy of Food                                    |
| PHIL 106:  | Philosophy and Current Issues                             |
| PHIL 213:  | Medical Ethics                                            |
| PHIL 221:  | Political Philosophy                                      |
| PHIL 225:  | Environmental Ethics                                      |
| PHIL 230:  | Philosophy of Law                                         |
| PHIL 320:  | Ethical Theory                                            |
| PHIL 323:  | Topics in Applied Ethics                                  |
| PHIL 325:  | Advanced Social Political Philosophy                      |
| POLS 100:  | Power and Politics in America                             |
| PSYC 334:  | Psychology of Environmental Sustainability (ENVR 334)     |
| RELG 227:  | Religion and Politics in America (HIST 227)               |
| SCIL 109:  | Water in Society (AECN 109, ENVR 109, GEOG 109, NRES 109) |
| SOCI 362:  | Ethics and the Responsible Conduct of Research            |
| TEAC 331:  | School and Society                                        |
| WMNS 210:  | Activism and Feminist Communities                         |

**NCTA A.S. Degree Requirement Information Literacy (1 Hour Required)**



Acceptable UNL Equivalent Courses - ACE 8: This course is required of all CASNR students.  
SCIL 101: Science and Decision Making for a Complex World

### **SPECIALIZATION CORE COURSES**

#### **Associate of Science – Agribusiness Management Systems Option (27 credits needed)**

|                                |                                                          |
|--------------------------------|----------------------------------------------------------|
| AECN 201                       | Farm and Ranch Management                                |
| AECN 225 / EAEP 225 / MRKT 225 | Agribusiness Entrepreneurship in Food Products Marketing |
| AECN 235                       | Introduction to Commodity Marketing                      |
| AECN 256                       | Legal Aspects in Agriculture                             |
| BLAW 300                       | Business, Government & Society                           |
| AECN 316                       | Agribusiness Management                                  |
| AECN 452                       | Agricultural Finance                                     |
| FINA 300                       | Financial Decision Making                                |
| FINA 361                       | Finance                                                  |
| AECN 420                       | International Food and Agricultural Trade                |
| AECN 425                       | Agricultural Marketing in a Multinational Environment    |
| AECN 435                       | Advanced Agricultural Marketing Management               |
| AECN 445 / NREE 445            | Agricultural and Natural Resource Policy Analysis        |
| AECN 453                       | Agricultural and Rural Property Appraisal                |
| SCMA 331                       | Operations and Supply Chain Management                   |
| MNGT 300                       | Management Essentials For Contemporary Organizations     |
| MNGT 301                       | Introduction to Management                               |
| MNGT 360                       | Managing Behavior in Organizations                       |
| MNGT 361                       | Human Resource Management                                |
| MRKT 300                       | Contemporary Marketing                                   |
| MRKT 341 / ABUS 341            | Marketing                                                |
| ACCT 201                       | Principles of Accounting 1                               |
| ACCT 202                       | Principles of Accounting II                              |
| ECON 211                       | Principles of Macroeconomics                             |
| ECON 212                       | Principles of Microeconomics                             |
| AECN 141                       | Introduction to the Economics of Ag                      |
| HORT 388                       | Agribusiness Entrepreneurship                            |

#### **Associate of Science – Agronomy Option (24 credits needed)**

|          |                                       |
|----------|---------------------------------------|
| AGRO 153 | Soil Resources                        |
| AGRO 204 | Resource-Efficient Crop Management    |
| AGRO 240 | Forage and Range Management           |
| AGRO 269 | Principles of Soil Management         |
| AGRO 366 | Soil Nutrient Relationships           |
| AGRO 405 | Crop Management Strategies            |
| AGRO 426 | Invasive Plants                       |
| AGRO 431 | Site-specific Crop Management         |
| AGRO 452 | Irrigation Systems Management         |
| ECON 211 | Principles of Macroeconomics          |
| ECON 212 | Principles of Microeconomics          |
| AECN 141 | Introduction to the Economics of Ag   |
| AECN 201 | Farm and Ranch Management             |
| AECN 325 | Marketing of Agricultural Commodities |

#### **Associate of Science – Mechanized Systems Management Option (29 credits needed)**

|          |                                    |
|----------|------------------------------------|
| AGRO 153 | Soil Resources                     |
| AGRO 204 | Resource-Efficient Crop Management |
| AGRO 366 | Soil Nutrient Relationships        |
| AGRO 405 | Crop Management Strategies         |
| MSYM 232 | Power and Machinery Principles     |

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|----------|---------------------------------------|
| MSYM 245 | Electrical Service Systems            |
| MSYM 412 | Hydraulic Power Systems               |
| MSYM 431 | Site-specific Crop Management         |
| MSYM 452 | Irrigation Systems Management         |
| ECON 211 | Principles of Macroeconomics          |
| ECON 212 | Principles of Microeconomics          |
| AECN 201 | Farm and Ranch Management             |
| AECN 325 | Marketing of Agricultural Commodities |
| ASCI 250 | Animal Management                     |

**Associate of Science – Agriculture Education Option (27 credits needed)**

|          |                                                                                |
|----------|--------------------------------------------------------------------------------|
| ALEC 102 | Interpersonal Skills for Leadership                                            |
| ALEC 104 | Wood Technology                                                                |
| ALEC 108 | Food in Society                                                                |
| ALEC 125 | Land, Food, and People                                                         |
| ALEC 134 | Agricultural Leadership, Education and Communication Careers                   |
| ALEC 135 | Early Field Experience in Agricultural Leadership, Education and Communication |
| ALEC 201 | Electricity/ Electronics                                                       |
| ALEC 202 | Foundations of Leadership Theory and Practice                                  |
| ALEC 205 | Welding Technology                                                             |
| ALEC 234 | Planning Leadership and Experience Programs                                    |
| ALEC 242 | Construction Technology                                                        |
| ALEC 302 | Dynamics of Effective Leadership in Organizations                              |
| ALEC 305 | Presentation Strategies for Agricultural Audiences                             |
| ALEC 308 | Laboratory Instruction and Management                                          |
| ALEC 494 | Undergraduate Seminar in Agricultural Education                                |

**Associate of Science – Animal Science Option (27 credits needed)**

|           |                                                        |
|-----------|--------------------------------------------------------|
| ASCI 95   | Animal Science Major Orientation Seminar               |
| ASCI 100  | Fundamentals of Animal Biology and Industry            |
| ASCI 100L | Fundamentals of Animal Biology and Industry Laboratory |
| ASCI 101  | Introduction to Animal Sciences                        |
| ASCI 150  | Animal Production Skills                               |
| ASCI 200  | Animal and Carcass Evaluation                          |
| ASCI 210  | Animal Products                                        |
| ASCI 213  | Meat Specifications and Procurement                    |
| ASCI 240  | Anatomy and Physiology of Domestic Animals             |
| ASCI 250  | Animal Management                                      |
| ASCI 252  | Introduction to the Horse Industry and Management      |
| ASCI 254  | Basic Swine Science                                    |
| ASCI 260  | Basic Equitation                                       |
| ASCI 300A | Principles of Meat Evaluation, Grading and Judging     |
| ASCI 300B | Principles of Livestock Evaluation and Judging         |
| ASCI 300E | Principles of Horse Evaluation and Judging             |
| ASCI 310  | Fresh Meats                                            |
| ASCI 315  | Animal Growth and Development                          |
| ASCI 320  | Animal Nutrition and Feeding                           |
| ASCI 322  | Equine Nutrition                                       |
| ASCI 330  | Animal Breeding                                        |
| ASCI 340  | Animal Physiological Systems                           |
| ASCI 341  | Physiology and Management of Reproduction              |
| ASCI 342  | Equine Reproduction                                    |
| ASCI 400A | Advanced Meat Grading and Evaluation                   |
| ASCI 400B | Advanced Livestock Evaluation and Judging              |
| ASCI 455  | Beef Cow-Calf Management                               |
| ASCI 457  | Beef Feedlot Management                                |