

# College of Agriculture and Natural Resources (AGNR)

## Upper Division Certificate - International Agriculture & Natural Resources

- Students shall develop effective communication skills and demonstrate the ability to present ideas with clarity to an appropriate audience.
- Students will demonstrate knowledge of policies and/or institutional arrangements (in a global context) relevant to agricultural, environmental, and natural resources.

## Department of Animal and Avian Sciences

### Bachelor's - Animal Sciences - Animal Care & Management

- Students will be able to identify at least three indicators of good and poor health in one vertebrate species.
- Students will be able to identify at least three signs of normal and abnormal behavior in one vertebrate species.
- Students will demonstrate safe animal handling skills.
- Students will be able to identify anatomical structures.
- Students will demonstrate ability to identify feedstuffs.
- Student will demonstrate ability to identify required nutrients.
- Identification of homeostatic regulation of at least five physiological systems.
- Review research article/publication and write an interpretive summary.
- Identify and obtain scientific review article and write an in-depth paper at a level beyond that presented in lectures and textbook.

### Bachelor's - Animal Sciences - Biotechnology

- Students will be able to identify at least three indicators of good and poor health in one vertebrate species.
- Students will be able to identify at least three signs of normal and abnormal behavior in one vertebrate species.
- Students will demonstrate safe animal handling skills.
- Students will be able to identify anatomical structures.
- Students will demonstrate ability to identify feedstuffs.
- Student will demonstrate ability to identify required nutrients.
- Identification of homeostatic regulation of at least five physiological systems.
- Review research article/publication and write an interpretive summary.
- Identify and obtain scientific review article and write an in-depth paper at a level beyond that presented in lectures and textbook.
- Demonstrate ability to use Gene Bank to find a gene and gene product based on its nucleotide sequence.
- Identification of methods of making transgenic animals.

### Bachelor's - Animal Sciences - Equine Studies

- Students will be able to identify at least three indicators of good and poor health in one vertebrate species.
- Students will be able to identify at least three signs of normal and abnormal behavior in one vertebrate species.
- Students will demonstrate safe animal handling skills.
- Students will be able to identify anatomical structures.
- Students will demonstrate ability to identify feedstuffs.
- Student will demonstrate ability to identify required nutrients.
- Identification of homeostatic regulation of at least five physiological systems.
- Review research article/publication and write an interpretive summary.

- Identify and obtain scientific review article and write an in-depth paper at a level beyond that presented in lectures and textbook.

#### **Bachelor's - Animal Sciences - Laboratory Animal Mgmt**

- Students will be able to identify at least three indicators of good and poor health in one vertebrate species.
- Students will be able to identify at least three signs of normal and abnormal behavior in one vertebrate species.
- Students will demonstrate safe Animal handling skills
- Students will be able to identify anatomical structures
- Students will demonstrate ability to Identify feedstuffs
- Student will demonstrate ability to Identify required nutrients
- Identification of homeostatic regulation of at least five physiological systems
- Review research article/publication and write an interpretive summary
- Identify and obtain scientific review article and write an in-depth paper at a level beyond that presented in lectures and textbook.

#### **Bachelor's - Animal Sciences - Science/Professional**

- Students will be able to identify at least three indicators of good and poor health in one vertebrate species.
- Students will be able to identify at least three signs of normal and abnormal behavior in one vertebrate species.
- Students will demonstrate safe animal handling skills.
- Students will be able to identify anatomical structures.
- Students will demonstrate ability to identify feedstuffs.
- Student will demonstrate ability to identify required nutrients.
- Identification of homeostatic regulation of at least five physiological systems.
- Review research article/publication and write an interpretive summary.
- Identify and obtain scientific review article and write an in-depth paper at a level beyond that presented in lectures and textbook.

#### **Bachelor's - Combined Program - Veterinary Science**

- Students will be able to identify at least three indicators of good and poor health in one vertebrate species.
- Students will be able to identify at least three signs of normal and abnormal behavior in one vertebrate species.
- Students will demonstrate safe animal handling skills.
- Students will be able to identify anatomical structures.
- Students will demonstrate ability to identify feedstuffs.
- Student will demonstrate ability to identify required nutrients.
- Identification of homeostatic regulation of at least five physiological systems.
- Review research article/publication and write an interpretive summary.
- Identify and obtain scientific review article and write an in-depth paper at a level beyond that presented in lectures and textbook.

## **Department of Agricultural and Resource Economics**

#### **Bachelor's - Agricultural & Resource Economics**

- Demonstrate knowledge of economic terms and concepts.
- Ability to draw inferences from data about economic questions.

- Knowledge of policies and institutional arrangements relevant to agricultural, environmental, and resource economics.

## **Institute of Applied Agriculture**

### **Lower Div Cert - Agricultural Business Management**

- Students should demonstrate proficient oral communication skills.
- Students should gain hands-on experience working at a job site that is pertinent to their major. Students should demonstrate an understanding of business practices and practical application of their class work.
- Students should possess the materials and skills needed to conduct an effective job search.
- All IAA students should be able to calculate the correct amount of plant nutrients to apply given a soil recommendation.

### **Lower Div Cert - Equine Business Management**

- Students should demonstrate proficient oral communication skills.
- Students should gain hands-on experience working at a job site that is pertinent to their major. Students should demonstrate an understanding of business practices and practical application of their class work.
- Students should possess the materials and skills needed to conduct an effective job search.
- All IAA students should be able to calculate the correct amount of plant nutrients to apply given a soil recommendation.

### **Lower Div Cert - Golf Course Management**

- Students should demonstrate proficient oral communication skills.
- Students should gain hands-on experience working at a job site that is pertinent to their major. Students should demonstrate an understanding of business practices and practical application of their class work.
- Students should possess the materials and skills needed to conduct an effective job search.
- All IAA students should be able to calculate the correct amount of plant nutrients to apply given a soil recommendation.
- Students will be able to develop an operating budget for a golf or athletic field facility.

### **Lower Div Cert - Landscape Management**

- Students should demonstrate proficient oral communication skills.
- Students should gain hands-on experience working at a job site that is pertinent to their major. Students should demonstrate an understanding of business practices and practical application of their class work.
- Students should possess the materials and skills needed to conduct an effective job search.
- All IAA students should be able to calculate the correct amount of plant nutrients to apply given a soil recommendation.

### **Lower Div Cert - Ornamental Horticulture**

- Students should demonstrate proficient oral communication skills.
- Students should gain hands-on experience working at a job site that is pertinent to their major. Students should demonstrate an understanding of business practices and practical application of their class work.
- Students should possess the materials and skills needed to conduct an effective job search.

- All IAA students should be able to calculate the correct amount of plant nutrients to apply given a soil recommendation.

#### **Lower Div Cert - Turfgrass Management**

- Students should demonstrate proficient oral communication skills.
- Students should gain hands-on experience working at a job site that is pertinent to their major. Students should demonstrate an understanding of business practices and practical application of their class work.
- Students should possess the materials and skills needed to conduct an effective job search.
- All IAA students should be able to calculate the correct amount of plant nutrients to apply given a soil recommendation.

## **Environmental Science and Technology**

#### **Bachelor's - Environmental Science & Policy**

- ENSP students will be able to demonstrate depth of knowledge and intellectual competence in an area of concentration related to ecosystem functioning and/or policy development or implementation.
- Students will be able to document readiness for full-time employment and/or graduate school.

#### **Bachelor's - Environmental Science & Technology**

- Students will understand and apply basic mathematical reasoning.
- Students will exhibit understanding in both social and natural science.
- Students will communicate clearly and effectively in writing and speech.

#### **Bachelor's - Natural Resources Management - joint program**

- Students will understand and apply basic mathematical reasoning.
- Students will exhibit understanding in both social and natural science.
- Students will communicate clearly and effectively in writing and speech.

## **Department of Nutrition and Food Sciences**

#### **Bachelor's - Nutrition and Food Science**

- Competency in integrating laboratory skills into analysis of food.
- Competency in assessing the nutritional status of a patient and in developing an appropriate nutrition treatment plan for the patient.

#### **Post-Baccalaureate Certificate - Dietetic Internship**

- Demonstrate proficiency in 37 ADA mandatory and 7 specialty dietetic profession competencies.
- Competency in technology communication tools.
- Demonstrate website proficiency.
- Demonstrate critical thinking, reasoning and research skills.

- Demonstrate appropriate oral and written communication skills in dealing with persons of limited literacy and economic means.

## **Department of Plant Science and Landscape Architecture**

### **Bachelor's - Agriculture Sciences & Technology**

- Develop technical and knowledge-based skills in the required areas of study.
- Use technical and basic learned knowledge to collaborate, solve problems and then articulate conclusions.
- Develop effective communication skills and demonstrate the ability to present ideas with clarity to an appropriate audience
- Connect and build relationships with external groups in the appropriate fields of study.

### **Bachelor's - Landscape Architecture**

- Demonstrate an understanding of the design process used in landscape architectural practice.
- Demonstrate the ability to communicate through visual literacy using hand graphics and computer technology.
- Connect and build relationships with external groups in the appropriate fields of study.

### **Bachelor's - Plant Sciences**

- Develop technical and knowledge-based skills in the required areas of study.
- Use technical and basic learned knowledge to collaborate, solve problems and then articulate conclusions.
- Develop effective communication skills and demonstrate the ability to present ideas with clarity to an appropriate audience.
- Connect and build relationships with external groups in the appropriate fields of study.