DEPT. AGRI COURSE NUMBER: 1115

NUMBER OF CREDITS: 4 Credits – 3 lecture & 1 Lab

COURSE TITLE: Introduction to Shrimp Production

CATALOG DESCRIPTION:
Provides students with an introduction to shrimp production with an emphasis on fundamental concepts of physiology, nutrition, life cycle, and management in various production methods along with history, processing, and marketing of shrimp.

AUDIENCE:
Students majoring in Agriculture or those interested in enhancing their knowledge of shrimp production.

FULFILLS MN TRANSFER CURRICULUM AREA(S) (Leave blank if not applicable)
Area: by meeting the following competencies:
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PREREQUISITES OR NECESSARY ENTRY SKILLS/KNOWLEDGE: None

LENGTH OF COURSE: One semester

THIS COURSE IS USUALLY OFFERED:
Every other year fall spring summer undetermined

Four goals are emphasized in course at Minnesota West Community & Technical College:

1) ACADEMIC CONTENT: The academic objectives of this course are:
   a. Understanding of principles of shrimp production and the relationship to animal sciences.
   b. Identify nutritional and environmental requirements for shrimp production.
   c. Describe current alternatives to shrimp production.
   d. Understand the history of shrimp farming.
   e. Describe the physical features of shrimp including life cycle.
2) THINKING SKILLS: This course will help students improve the effectiveness of their thinking skills through:
   a. Researching materials and assembling a term paper.
   b. Using classroom information and applying that knowledge to the principles of shrimp production.
   c. Solving nutrition and animal health problems.

3) COMMUNICATIONS SKILLS: This course will help students improve their oral and written communication skills through:
   a. Writing and presenting a term paper
   b. Technical writing assignments
   c. Organize data and write reports
   d. Classroom discussion

4) HUMAN DIVERSITY: This course will help students recognize, understand, and appreciate human diversity through:
   a. Analysis of global food consumption trends and preferences.
   b. Analysis of variations in shrimp production across the globe.

TOPICS TO BE COVERED:
1. History of shrimp farming
2. Anatomy of shrimp
3. Life cycle and molt cycle
4. Shrimp immune system
5. Shrimp production methods
6. Water quality management
7. Shrimp production management techniques
8. Shrimp reproduction management
9. Nutritional requirements of shrimp
10. Disease diagnosis and management of shrimp
11. Economic impact of shrimp production on global markets
12. Shrimp harvesting and processing

COURSE LEARNING OUTCOMES (GENERAL):
Obtain a general understanding of modern shrimp production.

STUDENT LEARNING OUTCOMES (SPECIFIC):
1. Describe history development of shrimp farming
2. Compare various shrimp production methods
3. Identify anatomy physiology of shrimp
4. Identify stages and characteristics of the shrimp life cycle
5. Identify nutritional requirements of shrimp
6. Identify shrimp diseases, infections, and treatment methods
7. Identify characteristics of animal health and disease control
8. Evaluate water quality and its impact on shrimp production
9. Diagram and describe mechanical systems associated with shrimp production
10. Develop waste management plans
11. Analyze environmental impact of shrimp production methods
12. Analyze global shrimp trade and markets
LEARNING/TEACHING TECHNIQUES used in the course are:
☒ Collaborative Learning ☒ Problem Solving
☒ Student Presentations ☐ Interactive Lectures
☐ Creative Projects ☐ Individual Coaching
☒ Lecture ☐ Films/Videos/Slides
☐ Demonstrations ☐ Other (describe below)
☒ Lab

ASSIGNMENTS AND ASSESSMENTS FOR THIS CLASS INCLUDE:
☒ Reading ☒ Tests ☐ Individual Projects
☒ Oral Presentations ☐ Worksheets ☐ Collaborative Projects
☐ Textbook Problems ☐ Papers ☐ Portfolio
☒ Group Problems ☐ Term Paper
☐ Other (describe below)

Veteran Services: Minnesota West is dedicated to assisting veterans and eligible family members in achieving their educational goals efficiently. Active duty and reserve/guard military members should advise their instructor of all regularly scheduled military appointments and duties that conflict with scheduled course requirements. Instructors will make every effort to work with the student to identify adjusted timelines. If you are a veteran, please contact the Minnesota West Veterans Service Office.

The information in this course outline is subject to revision

To receive reasonable accommodations for a documented disability, please contact the campus Student Services Advisor or campus Disability Coordinator as arrangements must be made in advance. In addition, students are encouraged to notify their instructor.

This document is available in alternative formats to individuals with disabilities by contacting the Student Services Advisor or by calling 800-658-2330 or via your preferred Telecommunications Relay Service.

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