**Warren County School District**

**PLANNED INSTRUCTION**

**COURSE DESCRIPTION**

**Course Title:** Entomology

**Course Number:** 00315

**Course Prerequisites:** None

**Course Description:**

Entomology is a one semester elective course open to all students, grades 9 through 12. The course will explore the fascinating world of insects. Topics covered include: insect origins, external and internal anatomy and physiology of insects, insect behavior, insect classification and how insects impact human life and ecosystems. Students will create an insect collection, classifying insects to the family level.

**Suggested Grade Level:** Grades 9-12

|  |  |  |  |
| --- | --- | --- | --- |
| **Length of Course:** |  [x]  One Semester | [ ]  Two Semesters | [ ]  Other (Describe) |

**Units of Credit:** .5

**PDE *Certification and Staffing Policies and Guidelines* (CSPG) Required Teacher Certifications**:

CSPG 32-Biology; CSPG 30 - Agriculture

**Certification verified by WCSD Human Resources Department**: [x]  Yes [ ]  No

**TEXTBOOK AND SUPPLEMENTAL MATERIALS**

**Continue using Board approved textbook?** [x] Yes [ ]  No

Board Approved Textbooks, Software, Supplemental Materials:

Title: How to Know the Insects

Publisher: WCB/McGraw Hill (purchased through Amazon.com)

ISBN #: 0-697-04752-0

Copyright Date: 1978

Date of WCSD Board Approval: May 14, 2018

Title: Insect Appreciation

Publisher: WCB/McGraw Hill (purchased through Amazon.com)

ISBN #: 0-7872-6382-6

Copyright Date: 1978

Date of WCSD Board Approval: May 14, 2018

**BOARD APPROVAL:**

**Date Written:** 2/28/18

**Date Approved:** May 14, 2018 (November 5, 2018)

**Implementation Date:** 2018-2019

**SPECIAL EDUCATION AND GIFTED REQUIREMENTS**

The teacher shall make appropriate modification to instruction and assessment based on a student’s Individual Education Plan (IEP) or Gifted Individual Education Plan (GIEP).

**COURSE OVERVIEW**

1. Insect Collection

A. Collecting Techniques

B. Pinning and Labeling

C. Organization of Collection

D. Identifying Insects to Family

 II. Insect Origins

A. Evolutionary History

B. Characteristics of Closely Related Arthropods

III. External Anatomy

A. Major Parts of the Insect Body

B. Mouthparts

C. Parts of the Legs

D. Wing Venation and Wings

E. Exoskeleton

IV. Internal Anatomy

A. Respiratory System

B. Nervous System

C. Circulatory System
 D. Digestive System

E. Reproductive System

V. Insect Orders

A. Classification

B. Life Cycles

C. Behavior

D. Impact of Insect Species on Humans

E. Impact of Insect Species on Ecosystems

**STANDARDS**

**PA Academic Standards**

3.1.10 Biological Sciences

4.1.10 Ecology

4.5.10 Humans and the Environment

CC.3.5.9-12 Reading Informational Text

CC.3.6.9-12 Writing

**ASSESSMENT**

**Portfolio Assessment:** [ ] Yes [x]  No

**District-Wide Common Final Examination Required:** [x] Yes [ ]  No

**Course Challenge Assessment:** Students must score a minimum of 80% on the final exam.

**WRITING TEAM:** Warren County School District Teachers

**WCSD STUDENT DATA SYSTEM INFORMATION**

1. Is there a required final examination? [x]  Yes [ ]  No

***\*Warren County School District Policy 9741 and 9744 state, “All classes in grades 9-12 shall have a final exam.”***

1. Does this course issue a mark/grade for the report card? [x]  Yes [ ]  No
2. Does this course issue a Pass/Fail mark? [ ]  Yes [x]  No
3. Is the course mark/grade part of the GPA calculation? [x]  Yes [ ]  No
4. Is the course eligible for Honor Roll calculation? [x]  Yes [ ]  No
5. What is the academic weight of the course?

|  |  |  |
| --- | --- | --- |
| [ ]  No weight/Non credit | [x]  Standard weight | [ ]  Enhanced weight |
|  |  |  |