EVT 2900—Alternative Energy Systems and Applications
Three Semester Hours

PREREQUISITES:
None; completion of EVT 1000 may be helpful.

COURSE DESCRIPTION:
Provides an opportunity to complete individual projects that involve special topics concerning environmental engineering technology problems.

METHODS OF COURSE INSTRUCTION:
All material for this course is print-based. Instructor and students communicate and exchange materials through postal mail.

E-PRINT OPTION:
In this course, an option exists to use e-mail to submit your lesson assignments. Your assignment will be returned to you either as an e-mail attachment or as a hard copy sent through the postal mail, depending on the preferences of the instructor and/or program.

TEXTBOOKS AND SUPPLIES:

Chapters 1, 2, 4, 5, 6, and 13–15 are covered in this course. You are encouraged to read the other chapters according to your own interests and professional needs.

Calculator
A standard scientific calculator, Casio FX260SLR or the equivalent, is needed for this course. You may order the calculator from EdMap along with your textbook.

Note: If you have taken any previous EVT course through eLearning OHIO, you will already have the calculator.

NUMBER OF LESSONS:
The course has eight lessons complete with graded assignments and two supervised course examinations. You will have two hours to complete each exam. The exams consist of short-essay questions similar to those in the lesson writing assignments. Specific information about each examination and the form necessary to schedule the examination with a supervisor is included in Lessons 5 and 10. The lessons include:

• Lesson 1: Energy Usage in the United States
Lesson 2: Fundamentals of Turbo Machinery
Lesson 3: Wind Energy
Lesson 4: Combustion Turbines
Lesson 5: Midcourse Examination Information
Lesson 6: Solar Energy Fundamentals
Lesson 7: Geothermal Energy
Lesson 8: Ocean Energy
Lesson 9: Nuclear Energy
Lesson 10: Final Examination Information

TYPES OF WRITING ASSIGNMENTS:
The writing assignments in Lessons 1–4, and 6–9 consist of short-essay questions based on your reading. Some answers may require calculations using given formulas. Each assignment is submitted to your instructor for evaluation and grading.

GRADING CRITERIA:
Your final grade for the course will be weighted on the following factors:

<table>
<thead>
<tr>
<th>Component</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lesson Assignments</td>
<td>20%</td>
</tr>
<tr>
<td>Midcourse Exam</td>
<td>30%</td>
</tr>
<tr>
<td>Final Exam</td>
<td>50%</td>
</tr>
</tbody>
</table>