Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should **not** be used to purchase course materials.
COURSE SYLLABUS

ENVR 330
ENERGY RESOURCES AND EFFICIENCIES

COURSE DESCRIPTION
An analysis of the various sources of energy (both fossil and renewable) utilized by modern societies, including the means by which these sources are acquired, produced, distributed, and consumed. Includes a survey of methods by which user-end efficiencies and/or alternatives can reduce the amount of energy consumed.

RATIONALE
This course is required for students enrolled in the B.S. in Business Administration Cognate in Green and Sustainable Management.

I. PREREQUISITES
For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASES
Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING
A. Computer with basic audio/video output equipment
B. Internet access (broadband recommended)
C. Microsoft Word
   (Microsoft Office is available at a special discount to Liberty University students.)

IV. MEASURABLE LEARNING OUTCOMES
Upon successful completion of this course, the student will be able to:
A. Calculate the energy densities of fuel sources and the energy efficiencies for various power-generation methods.
B. Describe a comparison of diverse conventional and alternative methods for electricity production.
C. Determine the timeframe for returns on investment for commercial and residential efficiency projects.
D. Articulate a biblical view of energy and resource stewardship.
E. Measure personal energy usage and determine methods of conservation.
F. Construct a detailed proposal for energy-saving retrofits to an existing building.

G. Discuss the benefits and drawbacks to government-sponsored incentives (rebates, credits, and subsidies) for the production and installation of energy-efficient products.

V. COURSE REQUIREMENTS AND ASSIGNMENTS

A. Textbook readings and lecture presentations

B. Course Requirements Checklist
   After reading the Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (4)
   The student is required to provide a thread in response to the provided prompt for each forum. Each thread must be at least 250 words and demonstrate course-related knowledge. In addition to the thread, the student is required to reply to 1 other classmate’s thread. Each reply must be at least 100 words.

D. Energy Production Report
   The student will write a 5–6-page research-based paper in current APA format that focuses on one of the various methods of energy production. The paper must include at least 3 references in addition to the course textbooks and the Bible. A title page, figures page(s), and reference page are required.

E. Energy Monitoring Report
   The student will write a 2–3-page research-based paper in current APA format that focuses on personal energy use monitoring and an action plan for energy efficiencies.

F. Stewardship Essay
   The student will compose a 4–5-page personal reflection essay on stewardship concepts and their relation to Christian perspectives of man’s place and role in God’s creation. This paper will be written in Microsoft Word and follow current APA formatting rules. The student is expected to research adequately the chosen topic and provide bibliographic reference to at least 3 academic sources in addition to the course textbooks. This paper must include a title page and reference page.

G. Quizzes (4)
   Each quiz will cover the Reading & Study material for the Module/Week in which it is assigned. They will be open-book/open-notes, contain 20 multiple-choice questions, and have a 25-minute time limit.

H. Exams (2)
   The Midterm Exam will cover the Reading & Study material for Modules/Weeks 1–4, and the Final Exam will cover the Reading & Study material for Modules/Weeks 5–8. Each exam will be open-book/open-notes, contain 45
multiple-choice questions and 1 short answer question, and have a 1-hour time limit.

VI. COURSE GRADING AND POLICIES

A. Points

Course Requirements Checklist: 10
Discussion Board Forums: 4 at 40 pts ea: 160
Energy Production Report: 100
Energy Monitoring Report: 80
Stewardship Essay: 100
Quizzes: 4 at 40 pts ea: 160
Exams: 2 at 200 pts ea: 400

Total: 1010

B. Scale

A = 900–1010  B = 800–899  C = 700–799  D = 600–699  F = 0–599

C. Late Assignment Policy

If the student is unable to complete an assignment on time, then he or she must contact the instructor immediately by email.

Assignments that are submitted after the due date without prior approval from the instructor will receive the following deductions:

1. Late assignments submitted within one week of the due date will receive a 10% deduction.

2. Assignments submitted more than one week late will receive a 20% deduction.

3. Assignments submitted two weeks late or after the final date of the class will not be accepted.

4. Late Discussion Board threads or replies will not be accepted.

Special circumstances (e.g. death in the family, personal health issues) will be reviewed by the instructor on a case-by-case basis.

D. Disability Assistance

Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.

VII. BIBLIOGRAPHY


# Course Schedule

**ENVR 330**


<table>
<thead>
<tr>
<th>Module/Week</th>
<th>Reading &amp; Study</th>
<th>Assignments</th>
<th>Points</th>
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<tbody>
<tr>
<td>1</td>
<td>Wolfson: chs. 2–3</td>
<td>Course Requirements Checklist</td>
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<td>Class Introductions</td>
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<td>DB Forum 1</td>
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<td>Wolfson: chs. 4, 7</td>
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<td>Energy Monitoring Report</td>
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<td>Stewardship Essay</td>
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**Total** 1010

DB = Discussion Board

**NOTE:** Each course week (except Module/Week 1) begins on Tuesday morning at 12:00 a.m. (ET) and ends on Monday night at 11:59 p.m. (ET). The final week ends at 11:59 p.m. (ET) on Friday.