COURSE IDENTIFICATION

Course Code/Number: ENRG 216
Course Title: Energy Investment Analysis

Division: ☑ Workforce Development (WD)

Credit Hour(s): Three (3)
Effective Date: SP2009/Fall2013
Assessment Goal Per Outcome: 70%

COURSE DESCRIPTION

This course teaches energy investment analysis. Topics include interest, simple payback, and life-cycle cost analysis, time value of money, cash flow equivalence, cost-benefit analysis, effects of tax credits, depreciation, inflation and/or escalating fuel costs on energy investments, and cost estimating procedures. The emphasis will be on analysis of energy investments using spreadsheets to consider total cost-benefits over the life of the investment.

MINIMUM REQUIREMENTS/PREREQUISITES AND/OR COREQUISITES

ENRG 104 Residential/Light Commercial Energy Analysis or Permission of Instructor
CSIS 121 Principles of Spreadsheets: Microsoft Excel 2007

TEXTS

The official list of textbooks and materials for this course is found on Inside NC.

http://www.neosho.edu/ProspectiveStudents/Registration/CourseSyllabi.aspx

GENERAL EDUCATION OUTCOMES

1. Practice Responsible Citizenship through:
• identifying rights and responsibilities of citizenship,
• identifying how human values and perceptions affect and are affected by social diversity,
• identifying and interpreting artistic expression.
2. Live a healthy lifestyle (physical, intellectual, social) through:
   • listing factors associated with a healthy lifestyle and lifetime fitness,
   • identifying the importance of lifetime learning,
   • demonstrating self-discipline, respect for others, and the ability to work collaboratively as a team.
3. Communicate effectively through:
   • developing effective written communication skills,
   • developing effective oral communication and listening skills.
4. Think analytically through:
   • utilizing quantitative information in problem solving,
   • utilizing the principles of systematic inquiry,
   • utilizing various information resources including technology for research and data collection.

COURSE OUTCOMES/COMPETENCIES (as Required)

Upon the successful completion of the course, the student should be able to:

1. Demonstrate the ability to use energy investment software.
2. Demonstrate the ability to perform investment calculations.
3. Demonstrate the ability to make conclusions based on data analysis.

MINIMUM COURSE CONTENT

The following topics must be included in this course. Additional topics may also be included.

1. Determining the Variables
2. Data Input
3. Software Conversions
4. Analysis
5. Recommendations

STUDENT REQUIREMENTS AND METHOD OF EVALUATION

INSTRUCTIONAL METHODS

1. Lecture
2. Audio-Visual aids
3. Example and demonstration
4. Review of student applications
5. Class discussions
6. Field trips and guest speakers
7. Tests (written)
8. Skills tests (performance-based)
STUDENT REQUIREMENTS

Evaluation of student performance is determined primarily from results of written tests to validate mastery of course competencies.

GRADING SCALE

<table>
<thead>
<tr>
<th>Percentage Range</th>
<th>Grade</th>
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<tbody>
<tr>
<td>90-100 %</td>
<td>A</td>
</tr>
<tr>
<td>80-89 %</td>
<td>B</td>
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<tr>
<td>70-79 %</td>
<td>C</td>
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<tr>
<td>60-69 %</td>
<td>D</td>
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<tr>
<td>0-59 %</td>
<td>F</td>
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</tbody>
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ASSESSMENT OF STUDENT GAIN

Students will be assessed through written testing. Comparison will determine the extent of student gain.

Attendance Policy

1. NCCC values interactive learning which promotes student engagement in the learning process. To be actively engaged, the student must be present in the learning environment.

2. Unless students are participating in a school activity or are excused by the instructor, they are expected to attend class. If a student’s absences exceed one-eighth of the total course duration, (which equates to one hundred (100) minutes per credit hour in a face-to-face class) the instructor has the right, but is not required, to withdraw a student from the course. Once the student has been dropped for excessive absences, the registrar’s office will send a letter to the student, stating that he or she has been dropped. A student may petition the chief academic officer for reinstatement by submitting a letter stating valid reasons for the absences within one week of the registrar’s notification. If the student is reinstated into the class, the instructor and the registrar will be notified. Please refer to the Student Handbook/Academic Policies for more information

3. Absences that occur due to students participating in official college activities are excused except in those cases where outside bodies, such as the State Board of Nursing, have requirements for minimum class minutes for each student. Students who are excused will be given reasonable opportunity to make up any missed work or receive substitute assignments from the instructor and should not be penalized for the absence. Proper procedure should be followed in notifying faculty in advance of the student’s planned participation in the event. Ultimately it is the student’s responsibility to notify the instructor in advance of the planned absence.

ACADEMIC INTEGRITY

NCCC expects every student to demonstrate ethical behavior with regard to academic pursuits. Academic
integrity in coursework is a specific requirement. Definitions, examples, and possible consequences for violations of Academic Integrity, as well as the appeals process, can be found in the College Catalog, Student Handbook, and/or Code of Student Conduct and Discipline.

**ELECTRONIC DEVICE POLICY**

Student cell phones and other personal electronic devices not being used for class activities must not be accessed during class times unless the instructor chooses to waive this policy.

**NOTE:**
Information and statements in this document are subject to change at the discretion of NCCC. Students will be notified of changes and where to find the most current approved documents.

**NON-DISCRIMINATION POLICY**

The following link provides information related to the non-discrimination policy of NCCC, including persons with disabilities. Students are urged to review this policy.

[http://www.neosho.edu/Departments/NonDiscrimination.aspx](http://www.neosho.edu/Departments/NonDiscrimination.aspx)

**COURSE NOTES**