Session M533
Orienting Students for Lifelong Learning Success
Sponsored by
Engineering a Bridge to Information Literacy

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Outline

- Background
- Methodology
  - Instructional Modules
  - Course Outline
- Results
- Conclusions & Future Plans
Background
The NEED

Information Literacy

Technical Writing

Engineering Success
WVU Information Literacy Course Enhancement Program (ILCEP) incentivized collaboration of librarians and engineering faculty to address these issues.
Freshmen have difficulty:

- Understanding the parts of a technical report
- Defining & avoiding plagiarism
- Finding appropriate sources for research
- Evaluating the validity & veracity of online sources
- Understanding Intellectual Property
Methodology
Collaboration & Planning

- Literature search
- Added Information Literacy
  - Student learning outcomes to course syllabus (ACRL/STS IL standards, ABET criteria)
  - Components to technical report grading rubric
- Developed 3 class sessions
  - Course management system
  - In-class activities
  - Homework assignments
  - Information Literacy pre/post quizzes (on-line)
<table>
<thead>
<tr>
<th>Week</th>
<th>Class Exercises</th>
<th>Assessments</th>
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<tbody>
<tr>
<td>Beginning of Class</td>
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<td>Pre-Test</td>
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<tr>
<td>Wk 2: Intro to Info</td>
<td>Plagiarism scenarios</td>
<td>Plagiarism Avoidance Tutorial</td>
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<td></td>
<td>When to cite scenarios</td>
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<tr>
<td>Wk 5: Info Tools</td>
<td>Identify parts of a citation</td>
<td>Pre-Quiz:</td>
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<tr>
<td></td>
<td>Find a citation</td>
<td>Post-Quiz:</td>
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<tr>
<td>Wk 11: Intellectual Property</td>
<td>Name that trademark</td>
<td>Pre-Quiz: IP</td>
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<td></td>
<td>Find that patent</td>
<td>Post-Quiz: IP</td>
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<tr>
<td>End of Class</td>
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<td>Post-Test</td>
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Engineering 101

Welcome

Engineering applies science and mathematics to solve practical problems from everyday life. Engineering uses physics, chemistry, materials science, mechanics, thermodynamics, systems analysis and mathematics to create a new and optimal solution.

This guide presents different tools available to engineers: books, articles, and handbooks and encyclopedias.

Scientific Information Cycle

The Publication Cycle and Scientific Research
Blackboard: eCampus

201108-ENGR-101-002 - Engineering Problem Solving

Your location: Home Page > Library Information > Week 5--Info Tools

- Engineering 101 LibGuide
- Basic Guide TO MLA Documentation
- Citation Builder
- Have a citation? Find it @ WVU
- eReserves
  Login using your MasterID and password. The title of the chapter is "Accessing Engineering Information" from the book _A Guide to Writing as an Engineer_, 3rd. ed.
  Engineering 101 Information Tools
- PreQuiz: Parts of a Citation
- Reading Quiz on "Accessing Engineering Information"
- PostQuiz: Parts of a Citation
FALL 2011
- 735 students
- 18 sections
- 2 librarians;
- 9 engineering faculty
- 1 coordinator
- Librarians taught 3 classes/section

SPRING 2012
- 185 students
- 4 sections
- 2 librarians
- 3 engineering faculty
- 1 coordinator
- Librarians taught 1-2 classes/section
Course Outline

Wk: 1-6
Bridge Project
- Intro to ENGR; Ethics, Teamwork
- IL1: Citations
- IL2: Information Tools
- Technical Communications

Wk: 7-11
EXCEL Project
- EXCEL
- ENGR Graphics

Wk: 12-16
Final Project
- IL3: Intellectual Property
- Final Design Project
Assessment Measures

- Pre/post quizzes for each Information Literacy module
- Informal faculty feedback
- Student survey
- Quality of technical reports
Results
Results

- New Information Literacy learning objectives in ENGR 101
- Technical report grading rubric includes Information Literacy criteria
- Inconsistent completion of pre/post tests
- Positive student feedback on survey
- Positive faculty feedback
Student Responses

MOST BENEFICIAL

- Glean information faster with focused research strategy
- Cognizant of information sources other than the Internet
- Ability to access library resources without physically going to the library

LEAST BENEFICIAL

- Difficulty in remotely accessing information via library webpage
Faculty Feedback

MOST BENEFICIAL

- Students:
  - Selected and used appropriate sources
  - Cited sources correctly

LEAST BENEFICIAL

- Giving up 3 class periods
- Use of Course Management System for quizzing and grading
Conclusions

- Information Literacy infusion into ENGR 101:
  - Successful
  - Worth repeating

- Lessons learned
  - Modify delivery system
  - Engage students with eCampus assessments
  - Sustainability
Future Plans

- Continue IL modules in ENGR 101
- Modified delivery:
  - 1 in-class session
  - 1 on-line module
  - 1 Out of Class Experience
- Improve assessment
  - Increase grade weight of quizzes
- Develop on-line modules
- Incorporate IL modules into online ENGR 101
References


THANK YOU!

Questions?