Building an Information Bridge to Engineering 101

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Video: Robin Hensel, WVU Assistant Dean of Engineering
Questions

• Why apply for this grant?
• How do the efforts fit in with the College Mission and ABET?
• How have our meetings worked out?
• How have the sessions gone so far?
• Can you explain about the Mini Conference you plan to hold?
Librarian’s Viewpoint
Summer Meeting

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<th>ALA/ACRL/STS Information Literacy Standards for Science and Engineering/Technology</th>
<th>ABET Criteria for Accrediting Engineering Programs</th>
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<td><strong>Standard 1.</strong> The information literate student determines the nature and extent of the information needed.</td>
<td>Engineering programs must demonstrate that their students attain an ability to identify, formulate, and solve engineering problems.</td>
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<td><strong>Standard 2.</strong> The information literate student accesses needed information effectively and efficiently</td>
<td>Engineering programs must demonstrate that their students attain an ability to use the techniques, skills, and modern engineering tools necessary for engineer practice.</td>
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<td><strong>Standard 3.</strong> The information literate student critically evaluates the procured information and its sources, and as a result, decides whether or not to modify the initial query and/or seek additional sources and whether to develop a new research process.</td>
<td>Engineering programs must demonstrate that their students attain an ability to design and conduct experiments, as well as to analyze and interpret data.</td>
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<td><strong>Standard 4.</strong> The information literate student understands the economic, ethical, legal, and social issues surrounding the use of information and its technologies and either as an individual or as a member of a group, uses information effectively, ethically, and legally to accomplish a specific purpose.</td>
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<td><strong>Standard 5.</strong> The information literate student understands that information literacy is an ongoing process and an important component of lifelong learning and recognizes the need to keep current regarding new developments in his or her field.</td>
<td>Engineering programs must demonstrate that their students attain an ability to communicate effectively.</td>
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<td>Information literacy in science, engineering, and technology disciplines is defined as a set of abilities to:</td>
<td>Engineering programs must demonstrate that their students attain a recognition of the need for, and an ability to engage in, lifelong learning.</td>
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|   • Identify the need for information  
   • Procure the information,  
   • Evaluate the information  
   • Subsequently revise the strategy for obtaining the information  
   • Use the information  
   • Use it in an ethical and legal manner  
   • Engage in lifelong learning. |
Assessments

- Pre-Test for Library Information
- Post-Test for Library Information
- Plagiarism Avoidance Tutorial
- PreQuiz: Parts of a Citation
- PostQuiz: Parts of a Citation
- Reading Quiz on "Accessing Engineering Information"
LibGuide for Engineering 101

- [http://libguides.wvu.edu/engg101](http://libguides.wvu.edu/engg101)


Engineering 101

This guide was created to assist Engineering 101 in using the WVU Libraries resources.

Last update: Sep 16th, 2011
URL: [http://libguides.wvu.edu/engg101](http://libguides.wvu.edu/engg101)

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 encyclopaedias.
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<td>Ethics in Engineering (Chap. 2), Information Literacy I</td>
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<td>Teamwork (Chap. 3.6)</td>
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<td>Technical Communication: Technical Report Writing (Chap. 4), Testing of Project 1 (Competition)</td>
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<td>Technical Communication: Oral Presentations (Chap. 4), Information Literacy II</td>
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<td>Oral Presentation of Project 1</td>
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<td>Mid-Semester Exam, Project Management, Microsoft Excel &amp; Data Analysis (Chap. 13-16)</td>
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<td>Design Project, Presentation of Final Project</td>
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<td>16</td>
<td>Finals Week</td>
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Three Sessions

• Week 2: Ethics of Information, Plagiarism; Using “Summon”
• Week 5: Information Tools: Reading a Citation, Using Databases, Finding articles
• Week 11: Intellectual Property with emphasis on Patents

Topics: Week 2

- Avoiding Plagiarism
- Scenarios
- Quoting Articles
- More than Google & Wikipedia
- Evaluating Information Resources
- Information Cycle
- Summon

Topics: Week 5

• Review of Peer Review & Citing Articles
• Types of Information
• Identifying parts of a Citation
• Properly Citing an Article
• Tools to Find Information
• Tools to Find a Citation
• Additional Library Resources
In Class Participation: “Your Turn”

- Plagiarism Scenarios
- When to Cite: Common Knowledge?
- Identifying Parts of a citation
- Finding articles using library resources

Video: Robin Hensel

Question: Why was Intellectual Property important for your students?
Librarian’s View of Intellectual Property
Assessments & Assignments: Week 11

• Reading: Intellectual Property Law for Engineers and Scientists, by Howard B. Rockman.

• Reading Quiz.

• Pre & Post quiz on IP (5pts.)

• Assignment: Find a patent or trademark related to your project.
Topics: Week 11

- Four types of Intellectual Property
- Agreements signed with contract
- Often Company wants to retain rights
- Trade Secrets Should Not be shared if you sign an agreement
- Copyright
- Trademarks
- Patents

View of 1st two Sessions

What Would We Change?