

Session 11 Tuesday, Nov. 6<sup>th</sup>

Designing an Information Literacy Training Program:

# Principles & Methods of Assessment and measuring outcomes

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# Training and teaching begin with instructional design that considers

- What do the students already know?
- What do the students need to know?
- What content and behaviors are being taught to bridge that gap?



## Assessments consider

- What the student knew (in-coming competencies)
  - Point-in-time snapshot
  - Placement advice
- What the student learned (exit competencies)
  - Longitudinal growth measurement
  - “Value added” measurement



# Assessments demographics

- Institution-wide
- Discipline-based
- Target audience with larger population
- Individual Educational Plans



# Benefits of assessment

- Demonstrate a need
- Justify an expense
- Earn accreditation
- Articulate level of competencies to
  - Direct teaching strategies
  - Organize students into learning groups
  - Identify appropriate teaching resources

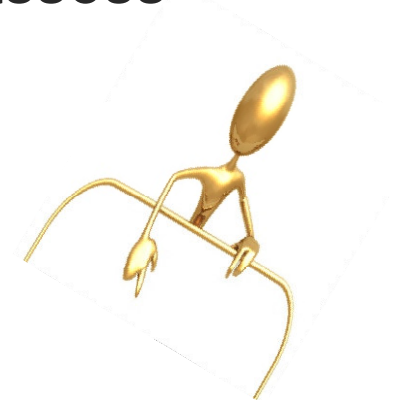


# ACRL has placed the foundation Standards and Indicators

- Recognize the need for information
- Identify potential sources of information
- Develop successful information search strategies
- Evaluate information critically
- Use information effectively to accomplish specific purposes
- Understand the ethical, legal, and social guidelines
- Access and use information ethically and legally

# [ Clarify objectives using ACRL ]

- Rank the relevancy/ importance of selected skills
- Be reasonable in the number of skills you assess
- Match the skills to
  - Abilities levels in your testing population
  - Teaching goals / content area
- Articulate levels of performance for each skill selected



# Think beyond cognitive skills

## Behavioral lifelong-learning skills include

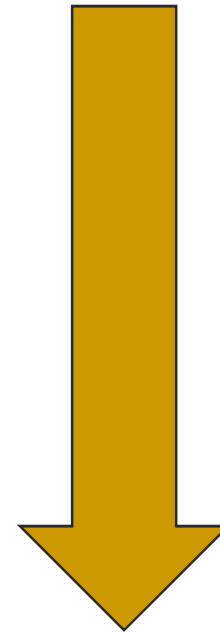
- Attitude toward and interest in the subject
- Persistence or time-on-task
- Realistic and relevant goal setting
- Multiple approaches to problem solving
- Willingness to apply the learning
- Ability to realistically self-asses (knowing when to ask for help)



# Bloom's Taxonomy of cognitive skills

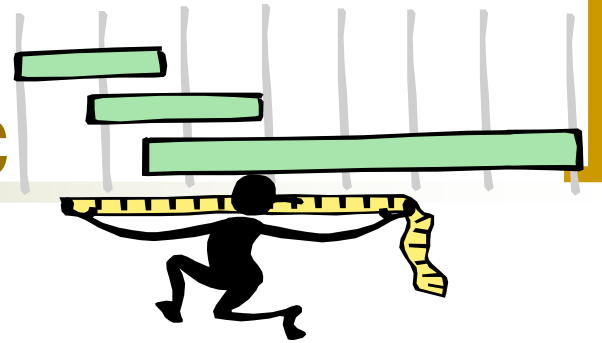
- Knowledge
- Comprehension
- Application
- Analysis (logical errors)
- Synthesis
- Evaluation (judgments)

**Most common**



**Least common**

# [ A Taxonomy /Rubric ]



- Is a scoring tool
- Lists the criteria for grading and
- Articulates gradations of quality or performance in each criterion (e.g., excellent to poor).

# Yakima Community College

The information literate student determines the nature and extent of the information needed.

Criteria:

Levels of student mastery			
1 - UNACCEPTABLE	2 - DEVELOPING	3 - ACCEPTABLE	4 - PROFICIENT
<ul style="list-style-type: none"> <li>Unable to define or articulate the need for information</li> <li>Unable to identify types of formats of potential sources</li> <li>Unable to reevaluate the nature and extent of information needed</li> </ul>	<ul style="list-style-type: none"> <li>Shows little ability to define and articulate the need for information</li> <li>Identifies only a few types of formats of potential sources</li> <li>Shows little ability to reevaluate the nature and extent of information needed</li> </ul>	<ul style="list-style-type: none"> <li>Defines and articulates the need for information</li> <li>Identifies some formats of potential sources</li> <li>Reevaluates the nature and extent of some of the information needed</li> </ul>	<ul style="list-style-type: none"> <li>Clearly defines and articulates the need for information</li> <li>Identifies types of formats of potential sources</li> <li>Reevaluates the nature and extent of most of the information needed</li> </ul>

The information literate student accesses needed information effectively and efficiently.

Criteria:

Levels of student mastery			
1 - UNACCEPTABLE	2 - DEVELOPING	3 - ACCEPTABLE	4 - PROFICIENT
<ul style="list-style-type: none"> <li>Fails to select appropriate investigative methods or information retrieval systems</li> <li>Student fails to construct or implement effectively-designed search strategies appropriate to the discipline</li> <li>Uses only one discipline appropriate method to retrieve information</li> <li>No understanding of how to record and manage information and its sources</li> </ul>	<ul style="list-style-type: none"> <li>Selects inappropriate investigative methods or information retrieval systems</li> <li>Student demonstrates an understanding, but unable to construct and implement search strategies appropriate to the discipline</li> <li>Uses some methods to retrieve information that are inappropriate to the discipline</li> <li>Demonstrates little understanding of records and minimal ability to manage information and its sources</li> </ul>	<ul style="list-style-type: none"> <li>Selects some appropriate investigative methods or information retrieval systems</li> <li>Student can to some degree construct and implement limited search strategies appropriate to the discipline</li> <li>Uses some of the discipline appropriate methods to retrieve information</li> <li>Demonstrates some understanding of records and some ability to manage information and its sources</li> </ul>	<ul style="list-style-type: none"> <li>Selects the most appropriate investigative methods or information retrieval systems</li> <li>Student effectively constructs and implements search strategies appropriate to the discipline</li> <li>Uses a wide variety of discipline appropriate methods to retrieve information</li> <li>Records and manages information and its sources</li> </ul>

# Trait ranks / scales



## Three point scale

- Emergent
- Satisfactory
- Proficient

- 
- No progress
  - Progress
  - Exceptional progress

## Four point scale

- Unacceptable
- Developing
- Acceptable
- Proficient

- 
- Unsatisfactory
  - Novice
  - Proficient
  - Exceptional

# Information Literacy Rubrics

The screenshot shows the website for Lorain County Community College. At the top left is the college logo and name. To the right is a search bar with a 'GO' button. Below this is a navigation menu with links for Home, Current Students, Future Students, Business/Industry, Community Services, About Us, and Faculty/Staff. The main content area is titled 'Information Literacy Rubrics' and includes a breadcrumb trail: Home > Library > Library Services > Services for Faculty > Information Literacy Rubrics. On the left side, there is a sidebar menu with categories like 'About the Library', 'Library Services', and 'Services for Faculty'. The 'Services for Faculty' category is expanded, showing 'Information Literacy Rubrics' as a sub-item. The main content area contains a heading 'Information Literacy Rubrics' followed by a paragraph explaining that the page lists examples of rubrics and asks for user feedback. Below this is a list of links to various rubrics from different institutions, including Delaware Technical & Community College, North High School Library, Marquette University, St John's University, Augustana College, North Carolina State University, Utah State University, University of Scranton, McKendree College, California State University, and NJCU.

**Lorain County Community College** Search

Home Current Students Future Students Business/Industry Community Services About Us Faculty/Staff

## Information Literacy Rubrics

Home > Library > Library Services > Services for Faculty > Information Literacy Rubrics

- About the Library
- Ask a Librarian
- Find Information
- How Do I
- Library Services
  - Ask a Librarian Form
  - Borrow or Renew Items
  - Computers and Computer Labs
  - Connect from Off Campus
  - Copyright Information
  - InterLibrary Loan
  - Library Classes
  - Services for Distance Learners
- Services for Faculty
  - Information Literacy Rubrics
  - Library Liaisons
  - Recommend Purchases Form
  - View Videos on Demand
- Welcome to the Lorain County Community College Library

### Information Literacy Rubrics

Below are listed examples of information literacy rubrics. If you find or develop additional rubrics to be added here or if any of these links do not work, please alert Chris Sheetz, Instruction Services and Reference Librarian.

- [Delaware Technical & Community College Libraries Information Literacy Guidelines for Rubrics](#)
- [A more detailed rubric from Delaware Technical & Community College](#)
- [Research Process Rubric from North High School Library](#)
- [Marquette University Research Paper Grading Rubric](#)
- [St John's University Information Literacy Rubric](#)
- [Augustana College Information Literacy Rubric for General Education](#)
- [North Carolina State University Libraries College of Engineering Information Literacy Rubric](#)
- [Utah State University English 1010 Information Literacy Assessment Rubric](#)
- [University of Scranton](#)
- [McKendree College Information Literacy Rubric](#)
- [Rubrics for Assessing Information Competence in the California State University](#)
- [NJCU Library Information Literacy Rubrics](#)

# University of Maryland

excellent resources



Information and Library Services



Search



MyUMUC



UMUC Home



Back to Library



Search Library



Ask a Question



Library Catalog



Library Databases



Library News

## Research Skills Tutorial

### **Introduction**

[Module 1](#)  
The Research Process

[Module 2](#)  
Copyright and Plagiarism

[Module 3](#)  
Libraries, Resources and Services

[Module 4](#)  
How Call Numbers Work

[Module 5](#)  
Finding Books

[Module 6](#)  
Finding Articles

[Module 7](#)  
Finding Web Pages

[E-mail a question](#)

### **Introduction**

This online tutorial is designed to assist UMUC students by reviewing general research skills and introducing specific resources available to them.

Each module in the tutorial reviews a different research skill or research tool. Review questions are provided for Modules 2-7.

Questions and feedback regarding the content of this tutorial should be directed to the UMUC Information and Library Services:

**UMUC Information and Library Services**  
**Student and Faculty Services Center, Room 2255**  
**3501 University Blvd. East**  
**Adelphi, MD 20783 USA**  
**(301)985-7209**  
**800-888-UMUC x. 7209**  
[library@umuc.edu](mailto:library@umuc.edu)

[Module 1](#) ►

# U of Maryland - Still more



## Evaluate Internet Resources

The World Wide Web's accessibility and ease of use has led to an exponential increase in the amount of information available on the Internet. As a research tool, however, the Web lacks the quality assurance that editors provide with print publications or that librarians provide when collecting materials for their library. Therefore, given that some Web sites are out-of-date, biased, or inaccurate, it is crucial that people doing research in this medium learn how to critically evaluate the material they find.

The following checklist, divided into five separate criteria for evaluation, presents questions that should be asked to determine if a Web resource is of high quality or not. Go through each of the criterion and answer the questions. The greater number of questions answered "yes," the more likely that the source is of high quality.

### Criterion #1: Authority

1. Is it clear who is sponsoring the creation and maintenance of the page?
2. Is there information available describing the purpose of the sponsoring organization?
3. Is there a way of verifying the legitimacy of the page's sponsor? For instance, is a phone number or address available to contact for more information?
4. Is it clear who developed and wrote the material? Are his/her qualifications for writing on this topic clearly stated? Is there contact information for the author of the material?

### Criterion #2: Accuracy

1. Are the sources for factual information given so they can be verified?
2. Is it clear who has the responsibility for the accuracy of the information presented?
3. If statistical data is presented in graphs or charts, are they labeled clearly?
4. Are there errors you can substantiate in the data presented?

### Criterion #3: Objectivity

1. Is the page and the information included provided as a public service?
2. Is it free of advertising?
3. If there is advertising on the page, is it clearly separated from the informational content?
4. Are there any other signs of bias?

### Criterion #4: Currency

# U of Maryland

## Scholarly articles

UMUC
Information and Library Services

[Search](#)   [MyUMUC](#)   [UMUC Home](#)

[Back to Library](#)
[Search Library](#)
[Ask a Question](#)
[Library Catalog](#)
[Library Databases](#)
[Library News](#)

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### Identify and Locate Scholarly Journals

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**Table of Contents**

- [Distinguishing among Scholarly, Popular, and Trade Journals](#)
- [Locating a Scholarly or Professional Journal](#)
- [Using Ulrich's Periodical Directory to Identify Scholarly Journals](#)
- [Need Help?](#)

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#### Distinguishing among Scholarly, Popular, and Trade Journals

Your professor may ask you to use scholarly, peer reviewed, or refereed journals in your research paper, and you are not certain about how to find them.

Below are some characteristics for identifying the three types of periodical literature: scholarly/professional, popular, and trade. Ask a librarian for help if you are unsure how to categorize a particular title. Please note that not all of the criteria will apply to periodicals in each category.

For information on how to find articles, go to the guide on how to [Find Articles](#).

	Scholarly/ Professional Journals	Popular Magazines	Trade Publications
<b>Article Type</b>	In-depth research articles, often peer-reviewed; usually includes an abstract; may be brief news of developments in the field or recent research, academic book reviews	Brief, nontechnical, current events, news; quick facts; short interviews, brief book reviews, ads	Product reviews; industry statistics; new publications; patents
<b>Purpose</b>	To provide information about, report, or present original research or experiments	To provide general information to, entertain, or persuade the general public	To provide news or information to practitioners in an industry or trade
<b>Authors</b>	Clearly defined; experts with significant	Not always identified; staff writers	Not always identified; staff writers, practitioners

# Assignments to teach & assess Information Literacy skills

- Integrate IL skills into the curriculum
  - 50 minutes will not teach IL
  - Contextualized learning works
  - Graduate the learning from basic to advanced
- IL skills as part of a writing or speech project



# webcredibility.org



**Stanford Web Credibility Research**

Part of the [Stanford Persuasive Technology Lab](#)

[www.webcredibility.org](http://www.webcredibility.org)

## Stanford Guidelines for Web Credibility

### How can you boost your web site's credibility?

We have compiled 10 guidelines for building the credibility of a web site. These guidelines are based on three years of research that included over 4,500 people.

Guideline	Additional Comments	Supporting Research from our lab
<b>1. Make it easy to verify the accuracy of the information on your site.</b>	You can build web site credibility by providing third-party support (citations, references, source material) for information you present, especially if you link to this evidence. Even if people don't follow these links, you've shown confidence in your material.	<a href="#">chi00</a> , <a href="#">chi01a</a> , <a href="#">pt02</a> , <a href="#">unp</a>
<b>2. Show that there's a real organization behind your site.</b>	Showing that your web site is for a legitimate organization will boost the site's credibility. The easiest way to do this is by listing a physical address. Other features can also help, such as posting a photo of your offices or listing a membership with the chamber of commerce.	<a href="#">chi00</a> , <a href="#">chi01a</a> , <a href="#">chi01b</a> , <a href="#">pt02</a>
<b>3. Highlight the expertise in your organization and in the content and services you provide.</b>	Do you have experts on your team? Are your contributors or service providers authorities? Be sure to give their credentials. Are you affiliated with a respected organization? Make that clear. Conversely, don't link to outside sites that are not credible. Your site becomes less credible by association.	<a href="#">acm99</a> , <a href="#">chi99</a> , <a href="#">chi00</a> , <a href="#">chi01a</a> , <a href="#">chi01b</a> , <a href="#">pt02</a> , <a href="#">unp</a>
<b>4. Show that honest and trustworthy people stand behind your site.</b>	The first part of this guideline is to show there are real people behind the site and in the organization. Next, find a way to convey their trustworthiness through images or text. For example, some sites post employee bios that tell about family or hobbies.	<a href="#">chi99</a> , <a href="#">chi01b</a> , <a href="#">unp</a>
<b>5. Make it easy to contact you.</b>	A simple way to boost your site's credibility is by making your contact information clear: phone number, physical address, and email address.	<a href="#">chi00</a> , <a href="#">chi01a</a> , <a href="#">pt02</a> , <a href="#">unp</a>
<b>6. Design your site so it looks professional (or is appropriate for your purpose).</b>	We find that people quickly evaluate a site by visual design alone. When designing your site, pay attention to layout, typography, images, consistency issues, and more. Of course, not all sites gain credibility by looking like IBM.com. The visual design should match the site's purpose.	<a href="#">chi99</a> , <a href="#">chi00</a> , <a href="#">chi01a</a> , <a href="#">pt02</a> , <a href="#">unp</a>
<b>7. Make your site easy to use -- and useful.</b>	We're squeezing two guidelines into one here. Our research shows that sites win credibility points by being both easy to use and useful. Some site operators forget about users when they cater to their own company's ego or try to show the dazzling things they can do with web technology.	<a href="#">acm99</a> , <a href="#">chi99</a> , <a href="#">chi00</a> , <a href="#">chi01a</a> , <a href="#">pt02</a> , <a href="#">unp</a>
<b>8. Update your site's content often (at least show it's been reviewed recently).</b>	People assign more credibility to sites that show they have been recently updated or reviewed.	<a href="#">chi00</a> , <a href="#">chi01a</a> , <a href="#">pt02</a> , <a href="#">unp</a>
<b>9. Use restraint with any promotional content (e.g., ads, offers).</b>	If possible, avoid having ads on your site. If you must have ads, clearly distinguish the sponsored content from your own. Avoid pop-up ads, unless you don't mind annoying	<a href="#">chi00</a> , <a href="#">chi01a</a> , <a href="#">chi01b</a> , <a href="#">pt02</a> , <a href="#">unp</a>

# Consumer Reports Web Watch

**Consumer Reports** **WEBWATCH**  
LOOK BEFORE YOU CLICK

Consumers Union Sites  [advanced search](#) Wednesday, October 22, 2008

Home About Us Investigations Guidelines For Consumers For Media For Businesses  
Consumer Center Media Contact Us

site map email this page print LOGIN REGISTER

you are here: [Guidelines](#) > [Credibility Campaign](#)

**TOPICS:**

- Credibility Campaign
  - En Espanol
  - What is "The Pledge"?
  - Take the Pledge
  - Guidelines Compliant Sites
  - Opinion Leaders Pledge Support
  - 'Praise-Worthy' Campaign
  - FAQ's
  - Tell Us What You Think
- Industry Guidelines
  - Privacy Policy
- RSS Feeds
  - XML
  - RSS
- Tools
  - Increase Font Size
  - Decrease Font Size
  - Make Consumer Reports WebWatch Your Homepage

## Guidelines

**Credibility Campaign**

### CONSUMER REPORTS WEBWATCH GUIDELINES

We believe Web sites will promote Web credibility if they adopt these basic policies:

- 1 Identity:** ✓  
Web sites should clearly disclose the physical location where they are produced, including an address, a telephone number or e-mail address.  
Sites should clearly disclose their ownership, private or public, naming their parent company.  
Sites should clearly disclose their purpose and mission.

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- 2 Advertising and Sponsorships:** ✓  
Sites should clearly distinguish advertising from news and information, using labels or other visual means. This includes "in-house" advertising or cross-corporate ad sponsorships. Search engines, shopping tools and portals should clearly disclose paid

**About These Guidelines**

We believe Web site readers should be able to find these policies easily, on an "About Us" or "Site Center" page navigable from the home and other site pages.

These guidelines are by no means exhaustive, but they are based on the results of an extensive [research project](#) conducted by Consumer Reports WebWatch in December 2001 and January 2002; on expert opinion from our [board of advisers](#) and other information professionals; and other qualitative research.

ConsumerReports WebWatch plans to use similar methods to develop industry specific guidelines in such areas as [travel](#), [financial](#), [health](#), [children's Web sites](#) and others. As we complete our research and form those guidelines, we will publish them here.

**Take the 'Pledge'**

**Is online credibility important to your Web site?**

We challenge you to take the

# Johns Hopkins

**JOHNS HOPKINS UNIVERSITY** | **THE SHERIDAN LIBRARIES**

STAFF DIRECTORY | PERSONS WITH DISABILITIES | CONTACT US | SITE MAP | HOURS

HOME | LIBRARY SERVICES | ONLINE RESOURCES | CATALOGS | RESEARCH HELP | COLLECTIONS

Home > Research Help > General Research Help Topics > Evaluating Internet Information > Evaluating Internet information [Printer-friendly Version](#)

## Evaluating Information Found on the Internet

The World Wide Web offers information and data from all over the world. Because so much information is available, and because that information can appear to be fairly "anonymous", it is necessary to develop skills to evaluate what you find. When you use a research or academic library, the books, journals and other resources have already been evaluated by scholars, publishers and librarians. Every resource you find has been evaluated in one way or another before you ever see it. When you are using the World Wide Web, none of this applies. There are no filters. Because anyone can write a Web page, documents of the widest range of quality, written by authors of the widest range of authority, are available on an even playing field. Excellent resources reside along side the most dubious. The Internet epitomizes the concept of *Caveat lector: Let the reader beware.* This document discusses the criteria by which scholars in most fields evaluate print information, and shows how the same criteria can be used to assess information found on the Internet.

**What to consider:**  
[Authorship](#)  
[Publishing body](#)  
[Point of view or bias](#)  
[Referral to other sources](#)  
[Verifiability](#)  
[Currency](#)  
[How to distinguish propaganda, misinformation and disinformation](#)  
[The mechanics of determining authorship, publishing body, and currency on the Internet](#)

**Authorship** is perhaps the major criterion used in evaluating information. Who wrote this? When we look for information with some type of critical value, we want to know the basis of the authority with which the author speaks. Here are some possible filters:

- In your own field of study, the author is a well-known and well-regarded name you recognize.
- When you find an author you do not recognize:
  - the author is mentioned in a positive fashion by another author or another person you trust as an authority;
  - you found or linked to the author's Web/Internet document from another document you trust;
  - the Web/Internet document you are reading gives biographical information, including the author's position, institutional affiliation and address;
  - biographical information is available by linking to another document; this enables you to judge whether the author's credentials allow him/her to speak with authority on a given topic;
  - if none of the above, there is an address and telephone number as well as an e-

**SPOTLIGHT**  
[Proprietary Scholarship or Open Access?](#)  
John Willinsky, author of *The Access Principle*, will discuss newly emerging scholarly publishing practices and the potential for this body of knowledge to become more of a public resource for learning and deliberation on Thursday, October 30. [More...](#)  
[Archives](#)

# Assignment #1

## “Edited” webpages



- Teaching basic IL skills
- Use paper print outs of a homepage
- Remove organizational identifying information (e.g., URLs, logos, names)
- Ask students to use guideline to determine what type of organization produced the page

## Assignment #2

# Good site / Bad site exercise

- Teaches students to analyze
- Select a controversial topic  
(e.g., politics, health information, consumer products)
- Students must find a reliable and unreliable website
  - Use guidelines to explain levels of credibility
  - Identify fraud, bias, spoofing, or faulty logic
  - Illustrate trustworthy, credible content

## Assignment #3

# Write an instruction sheet

- Teaches students to apply the learning
- Give students evaluation guidelines
- Have them write a one page sheet explaining to other students
  - What the guidelines are
  - Importance of using guidelines to evaluate
  - **Where to go for extra help**

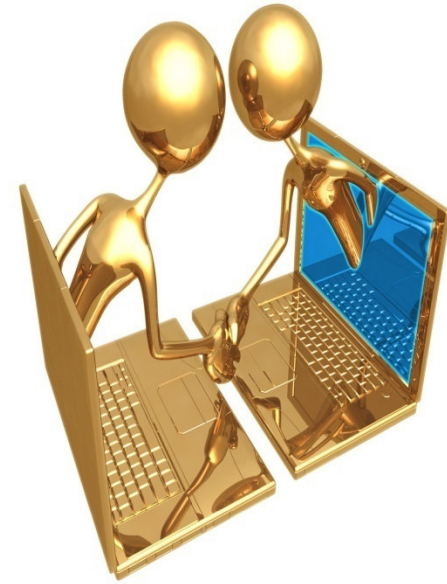


## Assignment #4

# Longer reports / case studies

- Teaches students evaluation
- The student takes the role of a manager of a company whose current website needs to be improved
- Compare current website with “competition”
- Make specific, concrete, research-based recommendations for improvements

Sharing information makes us  
all better teachers



For a PDF copy of  
the assignments,

E-mail me at:

[sternc@ferris.edu](mailto:sternc@ferris.edu)