



Information Literacy for a Freshman Engineering Studies Course

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University Studies Program

- 9 core components
- 5 imbedded components

ES 1000 – Orientation to Engineering Study

- I Intellectual Community (core)
- L Information Literacy (imbedded)
- O Oral Communication (introduction)



ES 1000 Course Components

- Freshman Reading Program - I
- Information Literacy - L
- Introduction to University Life - I
- Introduction to Engineering - I



ES 1000 Orientation to Engineering

- 13 Sections
 - 15 sessions (1 credit hour)
- 20-22 students per section
- Taught by faculty instructors and peer assistants
- Satisfies I and L and introduces O components



University Studies – L requirement

Students should demonstrate the ability to:

1. Formulate a research question.
2. Understand how to use information databases.
3. Use the UW catalog.
4. Discriminate between primary and secondary sources.



University Studies – L requirement

5. Discriminate between popular and scholarly sources.
6. Evaluate web sites and the differences between web based search engines.
7. Avoid plagiarism.
8. Know how to cite material.
9. Pass the TIP (Tutorial for Information Power) with a minimum score of 70.



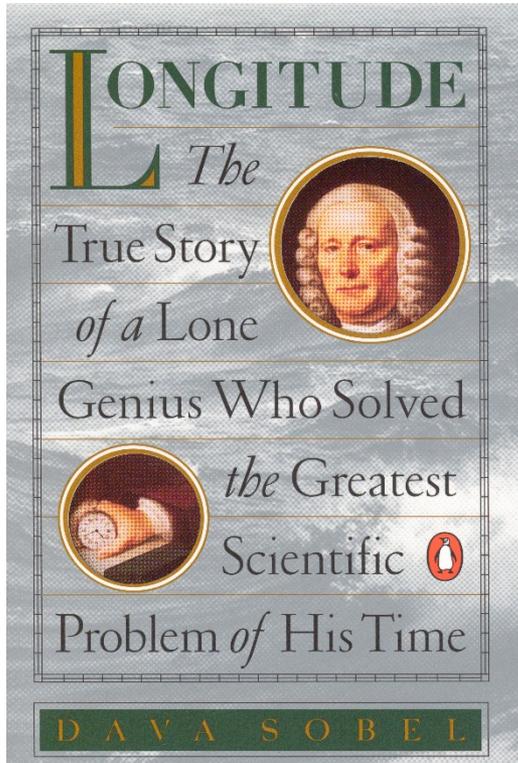
Literacy component of ES 1000

Pass the TIP Quiz (70% or better)

Develop a Research question

- Prepare a 3-5 page paper to answer the question
- Use minimum of 3 references
- Prepare a 3-5 page assessment of source

Longitude – UW Read 2005



- Freshman Reading Program.
- WHERE WILL IT LEAD YOU?
Longitude is a key element of navigation, mapmaking and surveying.
 - Design Challenge
 - Class Discussion – I activity
 - L activities

GPS Scavenger Hunt

- Locate the Science Library
- Locate the title of a book from the call number.
 - **Catalog**
 - **Physical location**



University of Wyoming Libraries

- Separate science library
- TIP Tutorial
- <http://www-lib.uwyo.edu/>

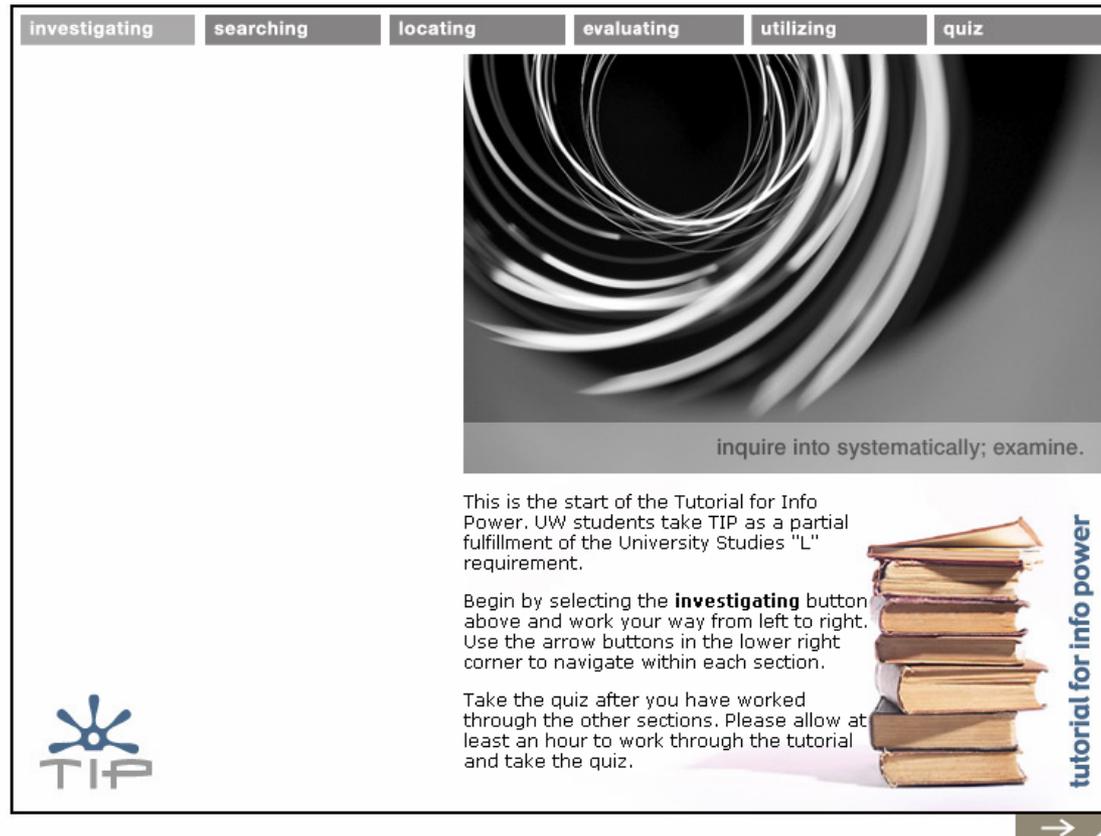
The screenshot shows the University of Wyoming Libraries website. At the top, there is a blue header with the University of Wyoming logo and the word "Libraries" in a large, bold font. Below the header is a banner image showing a library interior with bookshelves and people. A navigation menu is visible, listing various services: Books & more (library catalog, renewals...), Articles & more (databases, Ejournals...), Subject resources (guides, tutorials...), Reference tools (online dictionaries, encyclopedias...), Library services (interlibrary loan, science retrieval...), and About UW libraries (branches, directories...). On the right side, there is a "Multiple Library Catalog" section with a "Prospector" button. Below that is a "Ask Us!" section with the text "get answers quickly" and a list of services: digital projects, alumni & friends, hours, off-campus access, other libraries, and T.I.P. tutorial. At the bottom, there is a "WyoWeb" logo and a navigation bar with links for "What's New", "lib blog", "FAQ", "A to Z", "UW home page", and "My Account".

Science Library see special instructions
⇒ **CLOSED**



University of Wyoming Libraries
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Laramie, WY 82071
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(800) 442-6757

TIP - Tutorial for Info Power



The screenshot displays the TIP website interface. At the top, there are six navigation tabs: "investigating", "searching", "locating", "evaluating", "utilizing", and "quiz". The "investigating" tab is currently selected. Below the tabs, there is a large image of a spiral tunnel. Underneath the image, the text reads "inquire into systematically; examine." Below this, there is a paragraph of text: "This is the start of the Tutorial for Info Power. UW students take TIP as a partial fulfillment of the University Studies 'L' requirement." To the right of this text is a stack of books. Below the paragraph, there is another paragraph: "Begin by selecting the **investigating** button above and work your way from left to right. Use the arrow buttons in the lower right corner to navigate within each section." Below this, there is a third paragraph: "Take the quiz after you have worked through the other sections. Please allow at least an hour to work through the tutorial and take the quiz." In the bottom left corner, there is a logo for TIP, which consists of a stylized blue starburst shape above the letters "TIP". In the bottom right corner, there is a vertical text label "tutorial for info power" and a right-pointing arrow.

investigating searching locating evaluating utilizing quiz

inquire into systematically; examine.

This is the start of the Tutorial for Info Power. UW students take TIP as a partial fulfillment of the University Studies "L" requirement.

Begin by selecting the **investigating** button above and work your way from left to right. Use the arrow buttons in the lower right corner to navigate within each section.

Take the quiz after you have worked through the other sections. Please allow at least an hour to work through the tutorial and take the quiz.

TIP

tutorial for info power

<http://tip.uwyo.edu/categories.html>

Five Modules and Quiz

- Investigating
- Searching
- Locating
- Evaluating
- Utilizing
- Quiz



TIP – Quiz Login

investigating searching locating evaluating utilizing **quiz**

Logon to take the tip quiz

First Name

Last Name

Username

Password

Community College User: Guest:

Instructor

Logon Instructions:

UW Students, Faculty and Staff: Fill in your First and Last Name. Use your UW computer account? username and password. Select your Instructor from the drop down list then click the Logon button.

Wyoming Community College Students: Fill in your First and Last Name. Ignore the username and password fields and check the Community college User checkbox. Select your Instructor from the drop down list then click the Logon button.

Guests: Fill in your First and Last Name. Ignore the username and password fields and check the Guest checkbox. Select the Guest Instructor from the drop down list then click the Logon button.


[home](#)

<https://secure.uwlib.uwyo.edu/quiz/>



Example of a TIP Quiz question

1. Citations are important in a research paper because
 - they show how many sources you cited and thus, how much work went into the paper
 - they are a way to increase the page length of the paper
 - they assist others in finding your sources if they want to see the entire work themselves
 - all of the above



Results - TIP Scores

Fall Semester 2005

	Number of students	Average score
Total TIP	1472	84
Freshman	745	81
Freshman Engineering	199	81
Undeclared	88	80
Sophomore Engineering	28	86

TIP Quiz 91% completion rate



TIP Quiz Question Results

- Indicate that copyright is still not understood.
- Students still do not understand database searching.
- Which set of call numbers is in the correct order?
64% responded incorrectly



Questions & TIP questioned

- Is there a problem with the tutorial?
- Is there a problem with the questions themselves?
 - TIP is in revision again based on these results and comments from library faculty.



Library Presentation - optional

Why information and research is important!

- ◆ Tacoma Narrows Bridge - Engineering design flaw



The image is a composite slide with a dark blue background. On the left, there is a stylized, semi-transparent image of the Golden Gate Bridge. On the right, there is a black and white photograph showing the Tacoma Narrows Bridge in the process of collapsing into the water. The bridge deck is seen falling away from the towers, and the surrounding landscape is visible in the background. The text is overlaid on the blue background.

The Assignment - again

now the students are ready to ...

- 3-5 page research paper
- 3-5 assessment paper

2003 – 2004 student initiated research

2005 – faculty generated questions



Student initiated questions

A brief look

I want to find information on the new Hemi engine design.

I am looking at writing a paper about the longest suspension bridge in the world.



Reference Questions

- Student questions were not always clear
- Often came to the desk looking for Patented information
- Questions focused on a specific engineering problems



Example of a Faculty generated question

The 1714 Longitude Act was a successful “Design Competition.” Identify a modern successful design competition and compare it to the trials described in Longitude.





Results – WWW key points

- Students selected appropriate web material
- Evaluations indicated there was some confusion about Wikipedia
- Used a combination of domain sites

Results – Research Papers

- Many of the papers lacked references
- Journals citations were limited
- Web sites were the most common references



Student Evaluations

ES 1000 class evaluations – L component

Information Literacy Presentation was beneficial

Research paper was beneficial

The Library tutorial was beneficial

Attendance of the library workshop was beneficial



The Future

Fall 2006 ES 1000 Study

Power groups – 2 sections of 20 students

- TIP Quiz pretest
- TIP Quiz – taken at the end of the semester



Future Plans – continued

Tasks will include

- Reference and web site evaluations
- Faculty generated questions vs. student initiated questions.
- Writing assignment
 - Assessment by librarian, engineering faculty and writing center personnel

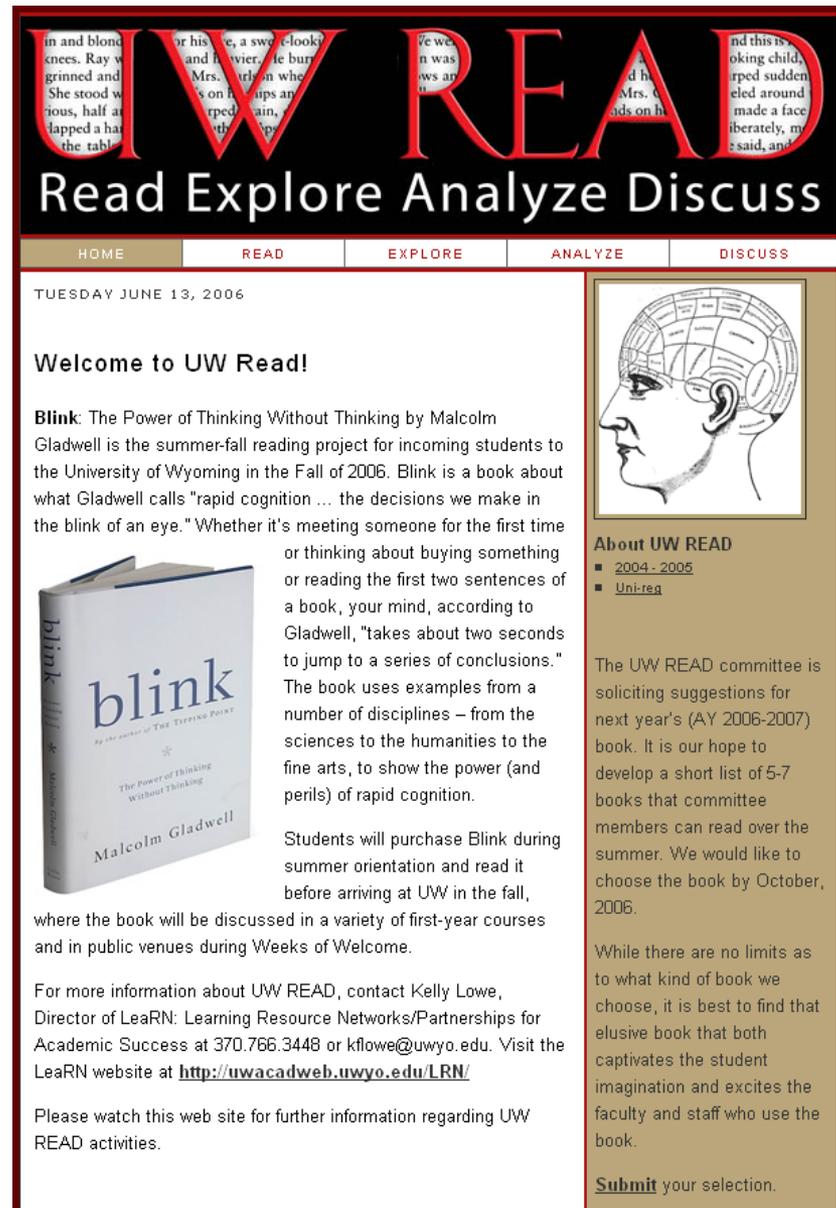


Other Ideas

- Can we incorporate Information literacy into upper level classes?
- Do we need to create a TIP for the sciences and engineering?
- What information skills do graduating engineers need?

Blink – M. Gladwell

- Choice for 2006
- "Blink" is a book about what Gladwell calls "rapid cognition -- the decisions we make in the blink of an eye."



The screenshot shows the UW READ website with a navigation bar (HOME, READ, EXPLORE, ANALYZE, DISCUSS) and a main content area. The main content includes a welcome message, a description of the book "Blink" by Malcolm Gladwell, an image of the book, and information about the selection process. A sidebar on the right contains a brain diagram, a list of past years (2004-2006), and a "Submit" button.

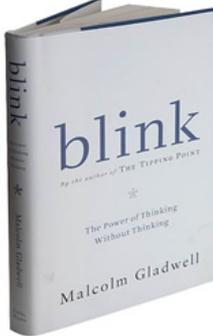
UW READ
Read Explore Analyze Discuss

HOME READ EXPLORE ANALYZE DISCUSS

TUESDAY JUNE 13, 2006

Welcome to UW Read!

Blink: The Power of Thinking Without Thinking by Malcolm Gladwell is the summer-fall reading project for incoming students to the University of Wyoming in the Fall of 2006. Blink is a book about what Gladwell calls "rapid cognition ... the decisions we make in the blink of an eye." Whether it's meeting someone for the first time or thinking about buying something or reading the first two sentences of a book, your mind, according to Gladwell, "takes about two seconds to jump to a series of conclusions." The book uses examples from a number of disciplines – from the sciences to the humanities to the fine arts, to show the power (and perils) of rapid cognition.



Students will purchase Blink during summer orientation and read it before arriving at UW in the fall, where the book will be discussed in a variety of first-year courses and in public venues during Weeks of Welcome.

For more information about UW READ, contact Kelly Lowe, Director of LeaRN: Learning Resource Networks/Partnerships for Academic Success at 370.766.3448 or kflowe@uwyo.edu. Visit the LeaRN website at <http://uwacadweb.uwyo.edu/LRN/>

Please watch this web site for further information regarding UW READ activities.

About UW READ

- 2004 - 2006
- Uni-reg

The UW READ committee is soliciting suggestions for next year's (AY 2006-2007) book. It is our hope to develop a short list of 5-7 books that committee members can read over the summer. We would like to choose the book by October, 2006.

While there are no limits as to what kind of book we choose, it is best to find that elusive book that both captivates the student imagination and excites the faculty and staff who use the book.

Submit your selection.

Links

UW University Studies

http://uwadmnweb.uwyo.edu/unst/USP_2003.htm

UW Read

<http://uwread.uwyo.edu/>

TIP

<http://tip.uwyo.edu/categories.html>

TIP Quiz

<https://secure.uwlib.uwyo.edu/quiz/>