

ISS 305:002  
Evaluating Evidence:  
Becoming a Smart Research Consumer

Instructor: Dr. Jonathan Weaver

Course location: G008 Holden Hall  
Course time: T/TH 3:00pm – 4:50pm

## Syllabus

- You are required to know what is in the syllabus.
  - You will be notified of any changes via D2L.
- The following slides highlight key points.
- Course Objectives
  - To help make students better at **evaluating evidence** for **empirical** claims

## Learning Goals Rubric

ISS ULG Dimension	Developing Level	Pursued in this course?
<b>Analytical Thinking</b>		
Acquires, analyzes, and evaluates information from multiple social science sources.	Retrieves information from a limited range of social science sources and identifies biases, strengths, and weaknesses within those sources.	Yes
Synthesizes and applies information within and across social science disciplines.	Identifies how information can be conceptualized differently within various social science disciplines.	Yes
<b>Cultural Understanding</b>		
Demonstrates awareness of how diversity emerges within and across cultures.	Understands culture and diversity as dynamic and contextual.	Not at the developing level.
<b>Effective Citizenship</b>		
Understands the structures of local, national, and global governance systems and acts effectively within those structures in both individual and collaborative ways.	Identifies strengths and challenges within institutional structures to address societal issues in individual and collaborative ways.	No
<b>Integrated Reasoning</b>		
Uses a variety of inquiry strategies incorporating multiple views to make value judgments, solve problems, answer questions, and generate new understanding.	Identifies distinct and valid inquiry strategies associated with specific social science fields of study and experiments with strategies within and/or across disciplines.	Yes

## Dr. Jonathan R. Weaver

- Email: [weaver71@msu.edu](mailto:weaver71@msu.edu)
- Office hours: Tuesday & Thursday 11am – noon
  - Psychology 252A
  - Or by appointment
  - Or see me before or after class

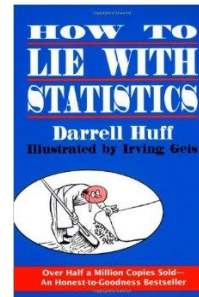
## Undergraduate Assistants

- Ryan Griffin – [griff546@msu.edu](mailto:griff546@msu.edu)
- Elise Penhollow – [penhollo@msu.edu](mailto:penhollo@msu.edu)

All Office hours TBD

## Texts & Tools

- 1 required textbooks:
  - Darrell Huff. *How to Lie with Statistics*. New York: Norton, 1954.
  - A reading list of additional content sources is posted on D2L.



## Texts & Materials

- OK: i>clicker, i>clicker2, i>clicker+



- NOT OK: web>clicker



## In-Class

- I know. I know. 3:00pm EST is a very early class start time, but we will start on time to cover all the cool stuff.
- Format: Lecture/Discussion
- Short break about half-way through the class (~3:50pmish)

## Grading

4 “required” inputs to your grade:

1. **Exams (highest 4 [out of 5] counted)** **80%**
  - i. You drop your lowest exam score, but that doesn’t mean you shouldn’t study for each exam.
  - ii. Make-up exams will only be given in case of a documented scheduled conflict, such as a religious holiday or required participation in a university-sanctioned event.
2. **In-Class Mini-quizzes** **10%**
  - i. a few questions every class (usually 5 – 10)
  - ii. drop lowest scores for 6 (of 22) days
  - iii. 9/7 is the 1<sup>st</sup> counted day
3. **Online Quizzes (highest 4 [out of 5] counted)** **9%**
  - i. See the syllabus for details and due dates
4. **Orientation Quiz** **1%**
  - i. See the syllabus for details

<b>Total</b>	<b>100%</b>
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## Grading

### Extra-Credit

1. In-class Discussion: up to **3%** extra
  - i. A chip received after each comment/answer
  - ii. Chips turned in throughout the semester
  - iii. See syllabus for chips to extra-credit points
2. Research participation up to **1%** extra
  - i. Information for SONA registration is provided on D2L.
  - ii. Alternative assignment available on D2L

Extra credit Total up to **4%** extra

This can make a **HUGE** difference in your grade.

**There is not an honors option offered for this course.**

## Grading

<i>Grade</i>	<i>Percentage</i>
4.0	89.50 – 100
3.5	84.50 – 89.49
3.0	79.50 – 84.49
2.5	74.50 – 79.49
2.0	69.50 – 74.49
1.5	64.50 – 69.49
1.0	59.50 – 64.49

**I will adhere to these cut-offs.** Extra credit is the only way to increase your point total if you are concerned about falling on the wrong side on one of these cut-offs.  
See the syllabus for the policy on grade changes.

## Academic Honesty

- Cheating is a serious offense.
- See the syllabus and the Student Handbook and Resource Guide.
- You are expected to understand these policies.
  - Ignorance is not an excuse.
- Any student caught cheating on exams or quizzes will receive a ZERO in this course, and be reported the University.
- Just do not do it!

## Emails

- See email policy in the syllabus.
- One simple rule will be extremely helpful!  
**–Ask yourself this question: “Can this question be answered by looking in the syllabus or looking on the D2L course site?”**
- Check your email and D2L regularly.

## Accommodations for Students with Disabilities

- Michigan State University is committed to providing equal opportunity for participation in all programs, services and activities. Requests for accommodations by persons with disabilities may be made by contacting the Resource Center for Persons with Disabilities at 517-884-RCPD or on the web at <http://rcpd.msu.edu>. Once your eligibility for an accommodation has been determined, you will be issued a Verified Individual Services Accommodation ("VISA") form. **Please present this form to me at the start of the term and/or two weeks prior to the accommodation date (exam, quiz, etc.). Requests received after this date may not be honored.**
- If you require testing accommodations (additional time, less disruptive room, etc.) you must contact me and present your VISA at least two weeks before the exam date to schedule an alternative exam. Typically, I will schedule for you to take the exam during a special exam session offered by the Psychology Department. Those exams occur in small group settings and I will contact you regarding the specific times and locations. If you are unable to make the times offered, or that option does not meet your VISA accommodations, you may be able to schedule to take your exam at the RCPD office. In either case, the exam must be scheduled well in advance, so you need to adhere to the two-week prior notification requirement.

## Course Schedule

List of Course Topics: Check the course D2L page to see which readings are assigned for each topic and to keep up with topics.

1. Introduction to course
2. Fallacies of deductive reasoning
3. Empirical statements and arguments
4. Science as a method of evaluation
5. Problems of measurement
6. Problems of description
7. Establishing associations
8. Real vs. illusory effects
9. Establishing causal relationships (Essentials of exp. methods)
10. Evaluating non-experimental evidence
11. Generalization
12. General strategies for evaluating evidence
13. Topical exercises

### Exam and Online Quiz Schedule:

Online Quiz 1 Due at 5pm: Tuesday, September 19<sup>th</sup>  
 Exam 1: Thursday, September 21<sup>st</sup>

Online Quiz 2 Due at 5pm: Sunday, October 15<sup>th</sup>  
 Exam 2: Tuesday, October 17<sup>th</sup>

Online Quiz 3 Due at 5pm: Sunday, November 12<sup>th</sup>  
 Exam 3: Tuesday, November 14<sup>th</sup>

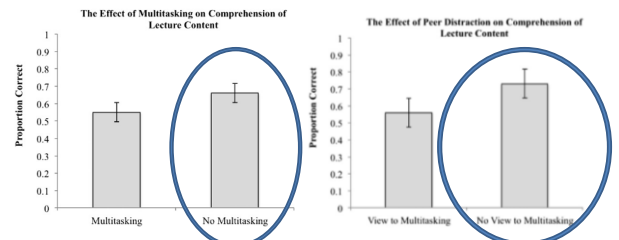
Online Quiz 4 Due at 5pm: Tuesday, December 5<sup>th</sup>  
 Exam 4: Thursday, December 7<sup>th</sup>

Online Quiz 5 Due at 5pm: Monday, December 11<sup>th</sup>

Cumulative Final: Wednesday, December 13<sup>th</sup> from 10am – noon in G008 Holden Hall

## Miscellaneous

- Note taking  
 – Students who multi-task on laptops in class and those sitting behind multi-tasking students have lowered comprehension of class material (Sana, Weston, & Cepeda, 2012).



## Miscellaneous

- Note taking
  - <http://pss.sagepub.com/content/early/2014/05/21/0956797614524581.full.pdf+html>

Even after disabling the internet, and making the laptops solely note taking devices, laptops still hamper the learning process due to shallower processing (Mueller & Oppenheimer, 2014). In short, when it comes to learning, laptop note taking is less effective than longhand note taking.

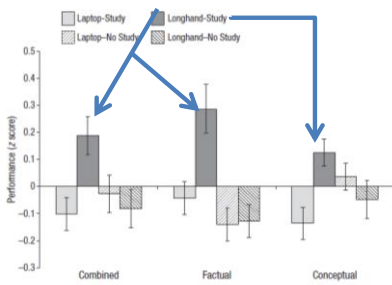


Fig. 5. Mean z-scored performance on factual-recall and conceptual-application questions as a function of note-taking condition and opportunity to study (Study 3). Combined results for both question types are given separately. Error bars indicate standard errors of the mean.

## Attendance and Exam Scores

- The correlation between the number of missed lectures and final grades is highly negatively correlated.
- To summarize, attending lecture appears to increase Exam scores.

## Warning!

- ISS 305 is a tough 4-credit course
- See “Dr. Weaver’s Study Tips – ISS 305” posted on D2L



## Rules for a happy, productive class

- 1) Turn off cell phones.
- 2) Show up to lectures on time.
- 3) Ask questions.
- 4) Be courteous of other people.
- 5) Wait for lecture to end before packing up your stuff to leave.



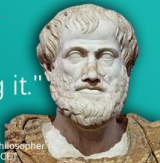
## Get Started!

- Finish your checklist
- Take the “ISS 305 (Section 2)

### Orientation Quiz”!

"It is the mark of an educated mind to be able to entertain a thought without accepting it."

Aristotle, Greek philosopher  
(384-322 BC)



Lowercase "s"!  
Hopefully! This will  
make sense soon!