



**Department of History, Florida Atlantic University**  
**WOH 2012-10709 --History of Civilization I—Fall semester, 2018 (3 credits)**  
**Lectures --WF in NU 113 -11:00-11:50 am– Boca Raton campus**  
**---plus mandatory Monday section meetings**

**Dr. Patricia Kollander—AL 153**  
**561-297-4156**  
**Preferred contact: [-kollande@fau.edu](mailto:-kollande@fau.edu)**  
**Office Hours: TR 2-5PM and by appointment**

**Graduate Teaching Assistants (Office: AH 109, office hours TBA)**

1. Mr. Colton Babbitt [cbabbitt2017@fau.edu](mailto:cbabbitt2017@fau.edu)
2. Mr. Ryan Dalmotte [rdalmotte2013@my.fau.edu](mailto:rdalmotte2013@my.fau.edu)
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**Lectures and Schedule of Monday Section Meetings:**

<a href="#">10709</a>	WOH 2012	History of Civilization 1	WF 11:00AM 11:50AM LEC NU 113	Dr. P. Kollander
<a href="#">10710</a>	WOH 2012	History of Civilization 1	M 10:00AM 10:50AM DIS AL 338	Ms. Maria Giraldo
<a href="#">10711</a>	WOH 2012	History of Civilization 1	M 10:00AM 10:50AM DIS AL 345	Mr. Colton Babbitt
<a href="#">10712</a>	WOH 2012	History of Civilization 1	M 10:00AM 10:50AM DIS CU 118	Mr. Ryan Dalmotte
<a href="#">10713</a>	WOH 2012	History of Civilization 1	M 10:00AM 10:50AM DIS CU 120	Mr. Stephen Krzeminski
<a href="#">10714</a>	WOH 2012	History of Civilization 1	M 11:00AM 11:50AM DIS CU 121	Mr. Stephen Krzeminski
<a href="#">10715</a>	WOH 2012	History of Civilization 1	M 11:00AM 11:50AM DIS CU 126	Mr. Ryan Dalmotte
<a href="#">10717</a>	WOH 2012	History of Civilization 1	M 11:00AM 11:50AM DIS AL 344	Ms. Maria Giraldo
<a href="#">12936</a>	WOH 2012	History of Civilization 1	M 11:00AM 11:50AM DIS AL 345	Mr. Colton Babbitt

<sup>1</sup> Pictured above: Alexander the Great, Ashoka of India, First Emperor of China, Augustus of Rome, the Roman Forum, Hua Mulan of China, Hildegarde of Bingen, Isabella of Castille

## Course Description

This course focuses on the development of world societies from Paleolithic times until 1600. Lectures provide historical context of key events and philosophical traditions. Examination of primary sources (first-hand or contemporary account of events or topics) via discussions and writing assignments will be conducted in weekly section meetings. This course fulfills the IFP Foundations in Global Citizenship and Writing Across Curriculum/Gordon Rule Writing requirements.

The contributions of European and non-European civilizations to the human condition will be stressed throughout. The necessity of studying both has been stressed by historian Edward Burns, who notes that:

“The time has long since passed when modern man could think of the world as consisting of Europe and the United States. Western culture is, of course, primarily a produce of European origins. But it has never been that exclusively. Its original foundations were in Southwestern Asia and North Africa. These were supplemented by influences seeping in from India and eventually China. From India and the Far East the West derived its knowledge of the zero, the compass, gunpowder, silk, cotton, and probably a large number of religions and philosophical concepts.”

***From the onset, it is necessary to point out that this is one of the most challenging courses at the FAU.*** Because it is a WAC or “Gordon Rule” course, each student must produce at least 5000 words of **acceptable** writing. Students must **also** become well-versed in the history of the period. In other words, **students MUST demonstrate competence in history AND writing to pass the course. Students averaging under a grade of 73 percent in EITHER the history OR the essay portion of the course will not receive Gordon Rule credit, and will have to repeat the course.**

**Classes:** This class will meet on **Wednesdays and Fridays** for lectures. Attendance at classes is expected. ***Please note: PowerPoint presentations utilized in lecture will not be reproduced on Canvas or on any other medium for students who miss class. Students who miss class must get notes from another student.***

**Sections—attendance is mandatory:** On **Mondays**, the class will be also divided into several recitation sections, which will be led by the graduate assistants. Their job will be to teach you how to analyze primary sources, and prepare you to write the longer paper assignment. They will also grade your written assignments. Failure to show up for sections will seriously compromise your grade; hence regular attendance is crucial.

**Students must purchase this book and only this book for the course**

Judge and Langdon, *Connections: A World History, Volume 1- to 1700* --(Pearson, 2016) and ISBN 9780134102849 - REVEL for *Connections: A World History, Volume 1* -- Access Card, 3rd Edition-- Students can purchase the access code from the bookstore for about \$73 retail).

-OR--students can purchase directly through REVEL for \$69

\*Both options include a 14 day trial period. Once students register for REVEL they have the option for a \$19 loose-leaf print upgrade. If they choose this option it will be sent to their home with shipping included.

**This is a web-assisted course.** Syllabi, handouts and paper topics will appear on Canvas. To access these materials, please log on to Canvas.fau.edu

### Grading

*Document analyses (written responses to questions about documents)	20%
*Long Essays (7-10 pages or 1750-2500 words)	35%
*First Exam- multiple choice	10%
*Second exam-multiple choice	15%
*Final Exam- multiple choice plus map test	20%

**---Late papers and assignments will not be accepted**

**--No early or makeup exams will be given**

**Written work**: Students must write several analyses of documents and a final paper (prior to submission of final paper, a rough draft will be subjected to peer review and instructor review). This written work will total the word count prescribed by the Writing Across the Curriculum (WAC) requirement.

**Document analyses**: students will provide paragraph-long written answers to several questions posed about documents studied and discussed in sections. Points will be deducted for answers that are too brief and/or fail to engage in analysis of the document. Four out of five of these analyses will be written during section meetings. Students who fail to attend sections will not be permitted to make up this written work.

**Long essay**: students are required to write a lengthy essay that has a thesis statement, a lengthy analysis of several documents related to a historical theme assigned to each section, and a conclusion. Papers will be evaluated on the basis of the Grading Rubric provided below. Please read instructions on page 3 carefully before you submit all of your papers.

**STUDENTS MUST WRITE PAPERS and DOCUMENT ANALYSES IN THEIR OWN WORDS.**

**Failure to do this constitutes plagiarism**, which means: "Improper use of another's ideas or language." Paraphrasing closely without giving credit or using original phrases or words without quotation marks are definitely examples of plagiarism. **Academic and legal penalties are severe and can include a failing grade in the course, expulsion, and even denial of college degrees.** Be scholarly and honest."

[Source: P.B.'s Research Paper Guide, (Lawrence, New York, 1991), p. 4]

### Grading scale

A	94-100	A-	90-93	B+	87-89	B	83-86
B-	80-83	C+	77-79	C	73-76	C-	70-72
D+	67-69	D	63-66	D-	60-62		
F	59 and below						

***Approaching the Professor:*** Please feel free to come and talk with me about any aspects of your experience in this course. I will be available **after** most lectures to talk and will always be found in my office during the hours listed above. If neither of these times are appropriate for you, please make an appointment with me. I will do my best to respond to all of your e-mail questions and will schedule extra office hours around exam times and paper deadlines.

***Your Teaching Assistant:*** Please remember that your teaching assistants are valuable resources, and are available every week for consultation during their own office hours or via e-mail.

***Classroom Etiquette:***

1. ***Students must use class time to engage course material and learn.*** This involves paying attention and taking thorough notes during lectures . It has been the experience of the instructor that laptops serve as a distraction to this crucial educational mission as most use the device not to take notes but to email or surf the internet; ***overall student performance suffers if even a handful of students are surfing the net or checking cell phones instead of taking notes during class time.***<sup>2</sup>

***For this reason, laptop computers are not permitted in the classroom, and use of cell phones is not permitted during lectures. If you intend to use class time to do anything apart from paying attention in class and taking notes, please do not come to class; your absence will not be held against you.***

Please remember that exams count for 45% of the course grade, and are largely based on material presented during lectures. Students therefore need to attend lectures regularly, and take thorough notes (this involves more than writing down what appears on each PowerPoint slide; students are also responsible for information that supports each bullet point). Thorough note-taking will not only help you do well in the course, it will also help class time pass more quickly!

Exception to the no laptop rule will be made only if I am provided with valid documentation.

2. Please do your very best to arrive to class on time.
3. If you are late for class, use the rear door of the lecture hall.
4. Do not leave early.
5. All students must adhere to appropriate classroom behavior at all times, which includes respect for the instructor and peers. Disruptive classroom behavior (this includes eating, talking, “texting” or any other kind of cell phone use) is distracting and unfair to other students who are in class to learn, as well as to the instructor, and will not be tolerated.

***Assistance for Students:***

***The Writing Center*** supports and promotes writing for all members of the FAU community -- undergraduate and graduate students, staff, faculty and visiting scholars. The center's consultants are informed and sensitive readers who help writers become more reflective readers and more self-sufficient

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<sup>2</sup> Please refer to the articles “**Attention, Students: Put Your Laptops Away,**” and “**Checking Phones in Lectures Can Cost Students Half a Grade in Exams**” at the end of the syllabus.

crafters of their written work. Consultants help students at any point in the writing process (i.e., brainstorming, drafting, revision) and with papers for courses, senior or master theses, dissertations, job applications, applications for graduate school, articles for publication, grant proposals and other documents. We provide writing aid rather than an editing service. Consequently, consultants may not get to all of a paper's issues, but writers will come away with a fresh perspective on their work as well as documents in which one or more aspects are improved. For information and hours, and to schedule an appointment, go to <http://www.fau.edu/ucew/>

**Students with disabilities:** In compliance with the Americans with Disabilities Act (ADA), students who require special accommodation due to a disability to properly execute coursework must register with Student Accessibility Services (SAS) and follow all SAS procedures. SAS has offices across three of FAU's campuses – Boca Raton, Davie and Jupiter – however disability services are available for students on all campuses. For further information, go to <https://www.fau.edu/sas/>

**Counseling Services:** Life as a university student can be challenging physically, mentally and emotionally. Students who find stress negatively affecting their ability to achieve academic or personal goals may wish to consider utilizing FAU's Counseling and Psychological Services (CAPS) Center. CAPS provides FAU students a range of services -- individual counseling, support meetings, and psychiatric services, to name a few -- offered to help improve and maintain emotional well-being. CAPS is located on the second floor above the Breezeway food court of the Boca Raton campus. For more information, go to <http://www.fau.edu/counseling> or call 561-297-3540

### **Other policies**

**Attendance Policy:** Students are expected to attend all of their scheduled University classes and to satisfy all academic objectives as outlined by the instructor. The effect of absences upon grades is determined by the instructor, and the University reserves the right to deal at any time with individual cases of non-attendance.

Students are responsible for arranging to make up work missed because of legitimate class absence, such as illness, family emergencies, military obligation, court-imposed legal obligations or participation in University-approved activities. Examples of University-approved reasons for absences include participating on an athletic or scholastic team, musical and theatrical performances and debate activities. It is the student's responsibility to give the instructor notice prior to any anticipated absences and within a reasonable amount of time after an unanticipated absence, ordinarily by the next scheduled class meeting. Instructors must allow each student who is absent for a University-approved reason the opportunity to make up work missed without any reduction in the student's final course grade as a direct result of such absence.

**Late work and absences:** Students may not be penalized for absences due to participation in University-approved activities, including athletic or scholastics teams, musical and theatrical performances, and debate activities; students may make up missed work without any reduction in the student's final course grade. Reasonable accommodation will be made for students participating in a religious observance.

**Grades of Incomplete** ("I") are reserved for students who are passing a course but have not completed all the required work because of exceptional circumstances (documented illness, death or severe illness in the family, unexpected hospitalization, or severe family crisis).

**Code of Academic Integrity policy** Students at Florida Atlantic University are expected to maintain the highest ethical standards. Academic dishonesty is considered a serious breach of these ethical standards, because it interferes with the university mission to provide a high quality education in which no student enjoys an unfair advantage over any other. Academic dishonesty is also destructive of the university community, which is grounded in a system of mutual trust and places high value on personal integrity and individual responsibility. Harsh penalties are associated with academic dishonesty. For more information, see University Regulation 4.001.

### **Student Participation in Assessment**

If this class is selected to participate in the university-wide WAC assessment program, you will be required to access the online assessment server, complete the consent form and survey, and submit electronically a first and final draft of a near-end-of-term paper.

### **Intellectual Foundations Program Statement of Goals and Assessment Methods**

**IFP Course Goals:** Students completing any IFP course will gain the following: The ability to think critically; the ability to communicate effectively; an appreciation for how knowledge is discovered, challenged, and transformed as it advances; and an understanding of ethics and ethical behavior. This section of WOH 2012 addresses these goals in the lecture and reading content **and** in the writing assignments that each student must complete. An assessment of each student's outcome is made throughout the term in the form of period exams and individual grades for each writing assignment.

**IFP Global Citizenship course goals:** Students completing the Global Citizenship requirement will demonstrate an understanding of: Different individual, cultural, and national identities; the economic, political, environmental, and/or social processes that influence human action/interaction. This section of WOH 2012 addresses these goals in the lecture and reading content **and** in the writing assignments that each student must complete. An assessment of each student's outcome is made throughout the term in the form of period exams and individual grades for each writing assignment.

## SCHEDULE OF CLASSES AND ASSIGNMENTS

August 20— Sections—How to take effective notes during lectures; intro to primary sources

August 22 --Lecture: Introduction and expectations/Historians and their craft

August 24—Lecture: Prehistory and Mesopotamia

**Reading: Connections, chapter 1**

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August 27 : Sections: -in-class writing assignment/discussion

August 29 Lecture: Egypt: Old, Middle and New Kingdoms

August 31: Lecture: Ancient Israel

**Reading: Connections, chapter 2**

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September 3-**Labor Day**—no class

September 5: Lecture: Ancient India, Hinduism and Jainism

September 7: Lecture: Ancient China

**Reading: Connections, chapters 3- 4**

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September 10—Sections: in-class writing assignment/discussion

September 12: Confucianism and Buddhism

September 14— Lecture: Ancient Greece: origins of the city state

**Reading: Connections, review chapters 3-4; chapter 7.1-7.4**

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September 17— review for first exam

September 19— Lecture: Ancient Greece: culture and society

**September 21— Exam I**

**Reading: Connections, chapter 7.5-7.7**

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September 24— Sections: in-class writing assignment/discussion

September 26— Lecture: The Roman Republic

September 28—Lecture: The Roman Empire

**Reading: Connections, chapter 8.1 to 8.3**

Writing assignment due on October 1: *Discuss origins and purpose of your assigned document, and how people were affected by it. Provide 1-2 quotes from each document that illustrates its point of view. Answer questions at the end of the document. What point about the applicable society could you prove, using this document as evidence? Length—500-1000 words*

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**October 1-- Sections: -out of class writing assignment due—peer review**

October 3-- Lecture: The Early Christian Church

October 5— Lecture: The Byzantine Empire

**Reading: Connections, chapter 8.4-8.5; 10.1-10.4**

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October 8— Sections—in-class writing assignment and discussion

October 10—Lecture: The Mongolian Empire and Russia

October 12—Lecture: Islam: Origins

**Reading: Connections, 15.3-15.5, 11.1-11.3**

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October 15 – Sections: review for second exam

October 17--Lecture: Islam—culture and expansion during the Middle Ages

**October 19 – Exam I**

**Reading: Connections, chapter 11.4-11.5; 12.1-12.4**

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October 22—Sections: sections-how to write the paper (intro, body of supporting evidence, conclusion)

October 24-- Lecture:—Africa Different but Equal

October 26-- Lecture: Early Middle Ages

**Reading: Connections, 13.1, 13.5-13.6; 9.1**

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**October 29— Completed paper due; peer review in sections**

October 31 --- Lecture: Growth of the Church

November 2— Lecture: Rise of National Monarchies

**Reading: Connections, chapter 9.2-9.4.**

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November 5—in-class worksheet

November 7: Lecture: India and China in Middle Ages

November 9: Lecture: 12<sup>th</sup> Century Renaissance, Scholasticism, Heresy and Reform

**Reading: Connections, 12.5-12.6;14.1-14.4**

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November 12 -review of selected papers-

November 14--Lecture—The Crusades



November 16--Lecture: Crises of the 14<sup>th</sup> century

**Reading: Connections, chapter 16.1-16.4**

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November 19: Sections: **Final writing assignment due/** review for Final Exam—map test portion

November 21—Lecture: The Renaissance- origins

**November 23—Thanksgiving holiday—no class**

**Reading: Connections, chapter 16.5**

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November 26—review for final exam

November 28 Lecture: Renaissance art and culture

November 30 Lecture: Discovery of the New World

**Reading: Connections, chapter 19**

**FINAL EXAM: W (Dec 12) 10:30am - 1:00pm**

## GUIDELINES FOR PAPER WRITING

### PLEASE READ CAREFULLY BEFORE YOU SUBMIT ALL PAPERS

1. appearance: papers must be typed and double-spaced. Leave 1 1/2 inch margins all around.
2. content: the long paper assignment will ask you to interpret and analyze selected documents in Pearson Revel. Quotes from the documents must figure prominently in your essays. Quotes from the narrative portions of the Judge and Langdon textbook are also required, as they will enable you to make solid observations about the era in question.
3. structure of paper: unless you are an acknowledged expert in the art of essay writing, you will help your cause by outlining your ideas before you write them out in your final draft. Please use this tried and true format for your papers: introduction, supporting evidence of main theme, and a conclusion (remember: a conclusion concludes; it does not summarize).
4. sources: students are to use only two sources: the Judge and Langdon text and the documents in Pearson Revel. **Other books and textbooks or Internet sites MAY NOT be consulted unless specifically required by the teaching assistant. Papers going beyond these sources will NOT be accepted.**
5. **citing sources and footnotes:** papers should have at least two correctly formatted footnotes per page—but not every sentence should be footnoted, as you are required to present your own analysis of your topic.

#### Sample footnotes

<sup>1</sup> Edward Judge and John W. Langdon, Civilizations: a World History (Boston: Pearson, 2016), Chapter 7.

<sup>2</sup> Plutarch, cited in Judge and Langdon, Civilizations, chapter 7.

<sup>3</sup> Judge and Langdon, Civilizations, chapter 7.

--The first footnote will be only full footnote in you papers, as students will be using only one source for the entire paper. Though you have an online text which is not paginated, you still need to cite which chapter you are quoting from.

--The second footnote shows how to cite a document, the third how to cite the textbook.

--Please don't use Ibid as a source citation as it is not specific enough.

--Book titles always, always-- must be underlined.

6. proper quotations vs. plagiarism: once again, your papers must be written in your own words.

7. It is NOT necessary to include a bibliography or works cited page, but **footnotes must appear (2-4 footnotes per page). Papers submitted without source citations will automatically receive an F.**

#### THE FOLLOWING RULES MUST BE FOLLOWED TO AVOID PLAGIARISM:

a. If you use an author's opinion in his/her own words, you are required to use quotation marks and the proper source citation. (**footnotes**) (Please note: a bibliography or source cited page is NOT required). Please consult the Hult writing guide.

**b. Again, papers submitted without source citations will automatically receive a grade of F.**

- **If you paraphrase an author's idea in your own words, you must include a source citation at the end of the paraphrase with the author referred to and the page in his/her text. Remember, a correct paraphrase involves far more than changing one or two of the author's original words in a quote.**

- If the author's opinion exceeds two sentences, the quote must be indented (5 spaces) and single-spaced, and a source citation should be put at the end of the quote.

\*if you are uncertain about these issues, please consult one of the members of the teaching staff.

**Failure to abide by these rules constitutes plagiarism. Once again, plagiarism constitutes an academic irregularity, and subject to provisions cited under the heading of academic irregularity in the**

**Undergraduate Catalog. Students found guilty of plagiarism face penalties ranging from failure in the course to expulsion from the University. PLAGIARISM FROM THE COURSE TEXTS, OTHER PRINTED SOURCES, OR THE INTERNET, WILL BE VIGOROUSLY PROSECUTED.**

8. writing: all papers must be written in correct English. They will be graded not only on the basis of content but on writing as well. Watch spelling, punctuation, grammar, sentence structure and word usage because they count in your grade.

**The papers comprise a crucial part of your overall grade in this course. Students' writing skills are expected to improve during the semester. Repetition of the same errors will result in a lower grade**

**For help with writing, please consult FAU's University Center for Excellence in Writing at <http://www.fau.edu/UCEW/>**

**Other useful writing tips can be obtained from the Purdue Online Writing Lab at <http://owl.english.purdue.edu/>**

## **Terms for Map Quiz**

### Europe

Athens

Berlin

Kiev

London

Madrid

Paris

Rome

Moscow

### Africa

Cairo

Khartoum

Johannesburg

Tunis

Liberia

Nairobi

Suez Canal

### Middle East

Baghdad

Damascus

Kabul

Riyadh

Teheran

### North and South America

Haiti

Los Angeles

Mexico City

Panama Canal

Santiago

### Asia

Beijing

Jakarta

Hanoi

Hong Kong

New Delhi

Singapore

Tokyo

Name \_\_\_\_\_

Section Leader \_\_\_\_\_



## Grading Rubric for WOH 2012 Essays

<i>CONTENT: the essay has the following:</i>	<i>Comments</i>
<ul style="list-style-type: none"> <li>• <u>An introduction that previews discussion of sources</u></li> </ul>	
<ul style="list-style-type: none"> <li>• An adequate amount of and discussion of supporting evidence (prescribed number of documents analyzed in the paper)</li> </ul>	
<ul style="list-style-type: none"> <li>• References from textbook to provide historical background</li> </ul>	
<ul style="list-style-type: none"> <li>• Analysis of primary sources</li> </ul>	
<ul style="list-style-type: none"> <li>• <u>A conclusion that addresses essay question (s) and exhibits analysis of the topic</u></li> </ul>	
<ul style="list-style-type: none"> <li>• Meets 1750 word minimum word count</li> </ul>	
<b><i>PRESENTATION AND WRITING</i></b>	
<ul style="list-style-type: none"> <li>• Source citation mechanics (correct footnote format, use of quotation marks)</li> </ul>	
<b><i>Punctuation and Grammar</i></b>	
<ul style="list-style-type: none"> <li>• Correct use of semicolons and colons, apostrophes, spelling</li> </ul>	
<ul style="list-style-type: none"> <li>• All verbs in past tense</li> </ul>	
<ul style="list-style-type: none"> <li>• Correct sentence structure (no sentence fragments or vague sentences)</li> </ul>	
<ul style="list-style-type: none"> <li>• First person singular and personal pronouns <u>not</u> used as instructed (no "I believe," "in my opinion," me, you, we, our)</li> </ul>	
<ul style="list-style-type: none"> <li>• Transitions and coherence (paragraphs follow logically)</li> </ul>	

# Attention, Students: Put Your Laptops Away

NPR STAFF--JAMES DOUBEK

As laptops become smaller and more ubiquitous, and with the advent of tablets, the idea of taking notes by hand just seems old-fashioned to many students today. Typing your notes is faster — which comes in handy when there's a lot of information to take down. But it turns out there are still advantages to doing things the old-fashioned way.

For one thing, research shows that laptops and tablets have a tendency to be distracting — it's so easy to click over to Facebook in that dull lecture. And a study has shown that the fact that you *have* to be slower when you take notes by hand is what makes it more useful in the long run.

In the study published in [Psychological Science](#), Pam A. Mueller of Princeton University and Daniel M. Oppenheimer of the University of California, Los Angeles sought to test how note-taking by hand or by computer affects learning.

"When people type their notes, they have this tendency to try to take verbatim notes and write down as much of the lecture as they can," Mueller tells NPR's Rachel Martin. "The students who were taking longhand notes in our studies were forced to be more selective — because you can't write as fast as you can type. And that extra processing of the material that they were doing benefited them."

Mueller and Oppenheimer cited that note-taking can be categorized two ways: generative and non-generative. Generative note-taking pertains to "summarizing, paraphrasing, concept mapping," while non-generative note-taking involves copying something verbatim.

And there are two hypotheses to why note-taking is beneficial in the first place. The first idea is called the encoding hypothesis, which says that when a person is taking notes, "the processing that occurs" will improve "learning and retention." The second, called the external-storage hypothesis, is that you learn by being able to look back at your notes, or even the notes of other people.

Because people can type faster than they write, using a laptop will make people more likely to try to transcribe everything they're hearing. So on the one hand, Mueller and Oppenheimer were faced with the question of whether the benefits of being able to look at your more complete, transcribed notes on a laptop outweigh the drawbacks of not processing that information. On the other hand, when writing longhand, you process the information better but have less to look back at.

For their first study, they took university students (the standard guinea pig of psychology) and showed them TED talks about various topics. Afterward, they found that the students who used laptops typed significantly more words than those who took notes by hand. When testing how well the students remembered information, the researchers found a key point of divergence in the type of question. For questions that asked students to simply remember facts, like dates, both groups did equally well. But for "conceptual-application" questions, such as, "How do Japan and Sweden differ in their approaches to equality within their societies?" the laptop users did "significantly worse."

The same thing happened in the second study, even when they specifically told students using laptops to try to avoid writing things down verbatim. "Even when we told people they shouldn't be taking these verbatim notes, they were not able to overcome that instinct," Mueller says. The more words the students copied verbatim, the worse they performed on recall tests.

And to test the external-storage hypothesis, for the third study they gave students the opportunity to review their notes in between the lecture and test. The thinking is, if students have time to study their notes from their laptops, the fact that they typed more extensive notes than their longhand-writing peers could possibly help them perform better.

But the students taking notes by hand still performed better. "This is suggestive evidence that longhand notes may have superior external storage as well as superior encoding functions," Mueller and Oppenheimer write.

Do studies like these mean wise college students will start migrating back to notebooks?

"I think it is a hard sell to get people to go back to pen and paper," Mueller says. "But they are developing lots of technologies now like Livescribe and various stylus and tablet technologies that are getting better and better. And I think that will be sort of an easier sell to college students and people of that generation."

## **Checking phones in lectures can cost students half a grade in exams**

Source: EurekAlert.com

Students perform less well in end-of-term exams if they are allowed access to an electronic device, such as a phone or tablet, for non-academic purposes in lectures, a new study in *Educational Psychology* finds.

Students who don't use such devices themselves but attend lectures where their use is permitted also do worse, suggesting that phone/tablet use damages the group learning environment.

Researchers from Rutgers University in the US performed an in-class experiment to test whether dividing attention between electronic devices and the lecturer during the class affected students' performance in within-lecture tests and an end-of-term exam.

118 cognitive psychology students at Rutgers University participated in the experiment during one term of their course. Laptops, phones and tablets were banned in half of the lectures and permitted in the other half. When devices were allowed, students were asked to record whether they had used them for non-academic purposes during the lecture.

The study found that having a device didn't lower students' scores in comprehension tests within lectures, but it did lower scores in the end-of-term exam by at least 5%, or half a grade. This finding shows for the first time that the main effect of divided attention in the classroom is on long-term retention, with fewer targets of a study task later remembered.

In addition, when the use of electronic devices was allowed in class, performance was also poorer for students who did not use devices as well as for those who did.



The study's lead author, Professor Arnold Glass, added: "These findings should alert the many dedicated students and instructors that dividing attention is having an insidious effect that is impairing their exam performance and final grade.

"To help manage the use of devices in the classroom, teachers should explain to students the damaging effect of distractions on retention - not only for themselves, but for the whole class."

This is the first-ever study in an actual classroom showing a causal relationship between distraction from an electronic device and subsequent exam performance.

###

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