

HOD1700: Systematic Inquiry
Spring 2011

Section 1 (Morning)

- Meeting times Wednesdays & Fridays, 8:45 – 10:00
- Final exam dates April 28th from 3:00 to 4:15 ...or... May 2nd from 12:00 to 1:15
- Location Hobbs 100B

Section 2 (Afternoon)

- Meeting times Wednesdays & Fridays, 12:45 – 2:00
- Final exam dates April 29th from 12:00 to 1:15 ...or... May 4th from 3:00 to 4:15
- Location Mayborn 204

Instructor

Andy Van Schaack, Ph.D.

- Office location Mayborn 203CA
- E-mail andrewvs@mac.com
- Office hours Wednesdays and Fridays from 10:00 – 12:00; other times by appointment
To schedule a meeting, go to www.scheduly.com and search for “hod1700”
- Course website <http://andrewvs.blogs.com/hod1700>

Objectives

Students participating fully in this course will:

- understand the value of skepticism, rational thought, and critical thinking in their personal and professional lives;
- be able to differentiate between opinion articles and reports of systematic research;
- gain familiarity with the most common methods of data collection and analysis techniques;
- develop and refine research questions;
- select appropriate research methods;
- collect and analyze data;
- report research findings in a professional format; and
- collaborate with classmates to improve and refine their critical thinking skills.

Students will demonstrate these skills through their ability to identify a research problem, generate appropriate research questions, conduct a literature review, select an appropriate methodology and design, collect data, interpret the results, and report them in a professional format.

Most importantly, students will develop their knowledge, skills, and dispositions in the following areas:

1. Critical thinking and problem solving skills
2. Collaboration across networks and leading by influence
3. Agility and adaptability
4. Initiative and entrepreneurialism
5. Effective oral and written communication
6. Accessing and analyzing information
7. Curiosity and imagination

Required Texts

All readings and lecture notes will be handed out in class and/or provided to you as PDF files posted to the website.

Recommended Text

American Psychological Association (2009). *Publication Manual of the American Psychological Association (6th ed.)*. Washington D. C.: American Psychological Association.

Assignments: Guidelines for Submission, Descriptions, and Grading

Guidelines for Completing and Submitting Homework Assignments

- All homework assignments are to be typed on a computer, printed out, and turned in by hand.
- The following assignments must *also* be turned in through Safe Assignment on the class Blackboard website:
 - *Literature Review*
 - *Critical Review of a Research Article*
 - *Group Research Project*

Just to be clear: These three assignments are to be turned in by hand *and* submitted through Safe Assignment. Both must be turned in by the due date and time in order to avoid late penalties.

- **You must work on ALL of your assignments independently. The only assignment where group work is acceptable is the *Group Research Project*. Think of each assignment as an open book, open note exam. If you have questions about an assignment, ask the instructor.**
- **You *may not* submit an assignment for this class—in whole or part—that was prepared and/or submitted for another course.**
- The *Literature Review* and *Group Research Project* are to be formatted according to APA 6th ed. guidelines.
- **All assignments are to be turned in prior to 2:30pm** on the dates indicated in the schedule. You can hand in your assignment during class or slide it under the door to the instructor's office (Mayborn 203CA).
 - One-half grade level will be deducted from assignments that are less than 30 minutes late.
 - One full grade level will be deducted from assignments for each day an assignment is late.
 - If you are sick, or out of town, or for any other reason cannot turn in an assignment personally, you must ask a fellow classmate or friend to turn it in for you. I will not accept assignments sent as email attachments with the exception of the *Group Research Project*.

Description of Assignments

1. Plagiarism Certification

Please complete the online tutorial and test at the website below and submit a printed copy of your “Confirmation Certificate.” Make sure to fill out all the fields at the bottom of the certificate—including your signature.

<https://www.indiana.edu/~istd/>

2. Literature Search and APA Formatting Lab

You will develop two research questions—one that could be researched using qualitative methods and the other using quantitative methods—and write them out using the formulas presented in class.

In addition, you will practice searching for research articles relevant to *one* of these questions. Please find at least three relevant articles, analyze each to determine the three key elements of the underlying research question, and provide references for each of them according to APA 6th edition guidelines. Keep the *Literature Review* and *Group Research Project* in mind as you search for articles—if you find more than three useful articles, keep record of them.

3. Institutional Review Board (IRB) Certification

Please complete the *Social Behavioral Investigators and Key Personnel* unit in the *Collaborative Institutional Training Initiative (CITI)* online training program and submit a printed copy of your “Certificate of Completion.”

www.citiprogram.org

4. Literature Review

You will conduct a review of the literature (including an Introduction section) on a research topic of your choice. Your final paper must be between 10 and 13 pages in length (including cover sheet, Abstract, and References section) and cite at least 10 peer-reviewed scientific publications. (You may also cite non peer-reviewed publications—magazines, newspapers, websites, and books—but the number of peer-reviewed articles must be 10 or greater.) If you choose to conduct a *Group Research Project*, your (or one of your group members') *Literature Review* will be the first 10 pages of the final 20-page report.

5. Critical Review of a Research Article

You will select one research article from among four choices offered and critically analyze it using the questions provided to you.

6. Group Research Project

You have the option to take part in a group research project or you may take the Final Exam. For the *Group Research Project*, you would work collaboratively in a group of up to four students. You would select a research question; conduct a review of the literature; design a study; collect data, analyze and interpret it; and report your findings in a professional format. The goal of this class is teach you how to conduct and critically evaluate research, accordingly, the class will take you progressively through the steps required to complete your *Group Research Project*. Your final project report must be between 20 and 25 pages in length (including cover sheet, Abstract, and References section). 25% of your grade for this assignment will be based on peer evaluations.

7. Professional Disposition

Five points of your final grade (one-half grade level) will be determined by your disposition throughout the semester. See page six of this syllabus for details.

Point Values for Assignments, Quizzes, and Exams

Reading Quizzes (12 @ 1 point apiece, <i>drop 2 lowest</i>).....	10 points
Plagiarism Certification	5 points
Literature Search and APA Formatting	10 points
Institutional Review Board (IRB) Certification	5 points
Active Participation in In-Class Demonstration I.....	5 points
Midterm Exam	15 points
Literature Review	15 points
Active Participation in In-Class Demonstration II	5 points
Critical Review of a Research Article	10 points
Final Exam <i>or</i> Group Research Project	15 points
Professional Disposition	<u>5 points</u>
	100 points

Letter Grade Ranges

A+ 97 – 100	B+ 87 – 89	C+ 77 – 79	D+ 67 – 69
A 93 – 96	B 83 – 86	C 73 – 76	D 63 – 66
A- 90 – 92	B- 80 – 82	C- 70 – 72	D- 60 – 62
			F Below 60

Note: The first decimal place of your *final score* (0.5 or greater) will be rounded up. For example, an 89.5 will be rounded up to 90.0. A final score of 92.2 will *not* be rounded up to 93.0. Scores for individual assignments, quizzes, and exams will *not* be rounded up.

Quality of Work and Grading

A grade of *A* is earned for **exceptional** work. Students who earn grades of *A+*, *A*, and *A-* are at the top of the class. A grade of *B* is earned for **good** work. I expect that many students will receive *Bs* because not every student is exceptional—by definition. A grade of *C* is earned for **inadequate** work where important elements are missing or where substantial improvement is required. *Ds* and *Fs* are received when it is evident little or no effort was put forth.

Request to Regrade an Assignment or Exam

You may request that an assignment or exam be regraded by resubmitting it with a typed cover sheet (including your full name, section number, and date) explaining your rationale for regarding. *Requests must be submitted no later than two weeks following the date the assignment or exam was returned to the class.* Note: I will regrade your *entire* assignment or exam so it is possible for your overall grade to fall.

Accommodation for Students with Disabilities

Vanderbilt University is committed to equal opportunities in education for all students. This includes students with documented physical disabilities and documented learning disabilities. It is the responsibility of the student to contact the instructor by the end of the first week of class each semester to provide documentation from the Opportunity Development Center (ODC) regarding approved accommodations. *Note: Students whose accommodation includes extra time for exams are responsible for scheduling their exams through the ODC. These exams must be taken on the same date and the same time as the exams taken by the students in their section.*

Honor Code

“Academic honesty is fundamental to the activities and principles of a university. All members of the academic community must be confident that each person’s work has been responsibly and honorably acquired, developed, and presented. Any effort to gain an advantage not given to all students is dishonest whether or not the effort was successful. The academic community regards academic honesty as an extremely serious matter, with serious consequences that range from probation to expulsion. When in doubt about plagiarism, paraphrasing, quoting, or collaboration, consult the course instructor.” [Source: <http://web.missouri.edu/~hanuscind/8710/>]

Excerpts from “Chapter 2: The Honor Code” [Source: www.vanderbilt.edu/student_handbook/chapter2.html]

Violations of the Honor Code are cause for disciplinary actions imposed by the appropriate honor council. Among the possible violations are the following:

- **Falsifying or cheating** on a report, paper, exercise, problem, test or examination, tape, film, or computer program submitted by a student to meet course requirements. Cheating includes the use of unauthorized aids (such as crib sheets, answer keys, discarded computer programs, the aid of another person on a take-home exam, etc.); copying from another student's work; unauthorized use of books, notes, or other outside materials during “closed book” exams; soliciting, giving, and/or receiving unauthorized aid orally or in writing; or similar action contrary to the principles of academic honesty.
- **Plagiarism** on an assigned paper, theme, report, or other material submitted to meet course requirements. Plagiarism is defined as incorporating into one's own work the work or ideas of another without properly indicating that source. A full discussion of plagiarism and proper citation is provided in the section below.
- **Failure to report** a known or suspected violation of the Code in the manner prescribed.
- **Any action designed to deceive** a member of the faculty, a staff member, or a fellow student regarding principles contained in the Honor Code, such as securing an answer to a problem for one course from a faculty member in another course when such assistance has not been authorized.
- **Any falsification of class records** or other materials submitted to demonstrate compliance with course requirements or to obtain class credit, including falsifying records of class attendance, attendance at required events or events for which credit is given, or attendance or hours spent at internships or other work service.
- **Submission of work prepared for another course** without specific prior authorization of the instructors in both courses.
- **Use of texts, papers, computer programs, or other class work prepared by commercial or noncommercial agents** and submitted as a student's own work.
- **Falsification of results** of study and research.

The Honor Code Applied to Preparation of Papers

- Papers are to express the original thoughts of the student. If a topic for a paper has been discussed fully among students prior to an assignment, then the students should consult the instructor about writing on that particular topic.
- Failure to indicate any outside source of ideas, expressions, phrases, or sentences constitutes plagiarism.
- A student may not submit papers substantially the same in content for credit in more than one course, without specific and prior permission of all instructors concerned.

Tests, Examinations, and Other Exercises

- Students are on their honor not to ask for or give information pertaining to any portion of an examination before or after they have taken it, in such a way as to gain or give an advantage over other student

Faculty Responsibilities [Source: <http://studentorgs.vanderbilt.edu/HonorCouncil/facguide.php>]

If a faculty member has reason to believe that a breach of the Honor System has been committed, he or she is obligated to take action in one of the following ways:

- Issue a personal warning to the student(s) suspected of academic dishonesty that, unless the action(s) that led to his or her suspicion ceases, the incident will be reported to the Honor Council, or
- Report the incident to the Honor Council.

The flagrancy of the violation determines which course of action the faculty member or student is expected to follow. **The option of warning the student personally is open to the instructor only in the event of a minor suspicion or if there is not evidence available. If suspicion is strong or if evidence is available, the instructor is obligated to report the incident to the Honor Council.**

Requesting Extensions or Make-Ups

“The faculty of the College of Arts and Science recognizes that occasions arise during the academic year that merit the excused absence of a student from a scheduled class or laboratory during which an examination, quiz, or other graded exercise is given. **Examples include participation in sponsored university activities (e.g., debate team, varsity sports), observance of officially designated religious holidays, serious personal problems (e.g., serious illness, death of a member of the student’s family), and matters relating to the student’s academic training (e.g., graduate or professional school interviews).** While determination of the merit of a case is left primarily to the discretion of the individual instructor, **conflicts arising from personal travel plans or social obligations do not qualify as excused absences.** The primary determination of whether a student’s absence from class occurs for a reason that warrants rescheduling a graded exercise for that student is left to the judgment of the individual instructor. A standard of reasonableness should apply in making such judgments. Except in cases of true emergency, student petitions for making up missed graded exercises must be made prior to the missed class, preferably at the beginning of the semester or at the earliest time thereafter when the need to be absent is known to the student. Faculty members retain discretion in the form and timing of makeup exercises or in devising other strategies for accommodating students.” [Source: www.math.vanderbilt.edu/~ramrasda/170A-1syllabus.doc]

Examples of Unacceptable Requests

An Overwhelmed Student

“I wanted to speak with you about the possibility of granting me a one day extension on the lit review based on some circumstances that have made completing the assignment by tomorrow extremely difficult. I am currently taking 18 hours of HOD coursework, applying to medical schools, applying to HOD internships, working part-time, and researching in the medical center. In the past two weeks, my coursework in my classes has been unusually heavy. I have been facing several deadlines with grad school applications and HOD internship deadlines, and have been facing a major time crunch at my work. Typically I avoid pulling all-nighters but there are occasions where I have done it. I have been averaging five hours a night consistently in the last couple weeks and am still sick. I am physically and mentally drained. This project is the last item I have left to complete, but I am not able to stay up and do it tonight I am physically unfit to start when I get out of my last class at 7 pm.”

A Student Who Knows That Being Overwhelmed is Not an Excuse, But Tries Anyway

I am in Section 2 of HOD 1700. I know that the "overwhelmed student" was not an acceptable excuse for an extension, but on October 21st, the day of your midterm, I also have a 10 page paper due and a 12-15 page paper due. I am talking with my other professors to see if they will work with me on doing something early or later, but I wanted to know if taking your midterm 1-2 days later could be an option. I am going to schedule a meeting on Tuesday afternoon if you would like to talk about this in person.

A Student Confused about the Due Date

“I am not sure why, but I think I just got the dates confused in my head. I thought the review was due Thursday and not Tuesday. I started working on it Saturday, but have a big Ethics paper I have been focusing on and just got really stressed out in giving my best work on both of these. I was wondering if there is anyway I could have an extension to Thursday.”

A Student Suffering Technical Difficulties

“I have a major problem. My computer spontaneously shut off with my assignment obviously being on it...and refuses to turn on. When I do manage to turn it on the screen flickers a solid blue and makes static noises and then shuts off again. I am on my way to the Mac store now to see if I can recover my files...if I am unable to recover these files I wanted to ask you what my options are concerning the assignment.”

A Student Who Wants to Do His Best

“I humbly ask for a 24 hour extension for the assignment. I am primarily asking for the extension, however, because of the caliber of work I know you expect from me and that I expect from myself. I *could* finish the work on time, but it will not meet the standard I know you expect me to meet regarding quality of work.”

Professional Dispositions

“The function of education is to teach one to think intensively and to think critically... intelligence plus character—that is the goal of true education.” – Martin Luther King, Jr.

My goal as your instructor is to provide you opportunities to develop the knowledge, skills, and *dispositions* necessary to succeed in the world. The only way to improve these is through hard work with good coaching. Students are used to working on their knowledge and skills, and receiving feedback through graded assignments and tests. I am adding an additional component related to your dispositions—your character. Some students think that college is not the “real world.” It is. Don’t wait until you graduate to start acting like a professional. Start now. Develop habits that will impress your employer and colleagues from your very first day on the job.

Just as you evaluate your instructors at the end of the semester, I will be evaluating you. Throughout the semester I will be observing your behavior and providing you feedback. These are some of the things I will be looking for:

1. Attendance Attendance is not required, but responsible students attend class nevertheless.
2. Punctuality If you show up on time, you’re late. Arrive to class a few minutes early, get settled in, and then be quiet and focused the moment class starts. You’ll know that class has started because I’ll say something like “Ok. Let’s get started.” Also, maintain attention until the last moment of class. Do not pack up your materials in anticipation of the end of class, it’s rude. You’ll know that class has ended when I say, “That’s it for today, I’ll see you next time.”
4. Attention Pay attention in class. This means you should not sleep, talk with your neighbor, read material that is not related to class, text message, **or work on your computer**. When a student asks a question or makes a comment, pay careful attention to what they are saying. You should show your fellow students as much respect as you show me. You expect the same from them.
3. Participation Students almost always have an opinion on the issues discussed in class. Don’t keep them to yourself or whisper them to a neighbor. Raise your hand and contribute. Don’t worry about sounding foolish. It’s ok to be wrong. Be brave. Discovering that you’re wrong and changing your mind is essential to learning. If you don’t understand something, ask.
4. Maturity Don’t make excuses and ask for an extension unless it is justified according to the criteria listed on the top of page five—not your personal criteria. The rules listed in this syllabus apply to everyone. Don’t try to negotiate every last point on assignments or tests. Some students say, “It doesn’t hurt to ask.” It *does* hurt to repeatedly ask. Someday, you will legitimately need help a and you will not receive it if you have abused the privilege in the past.
5. Responsibility You have the syllabus—many answers to the questions students ask me can be found in it. Figure things out for yourself whenever you can.
6. Communication You should use a professional tone in email correspondence with all of your professors. You should start with “Dear Andy,” or “Dear Dr. Van Schaack.” Spelling, grammar, and punctuation are important. Be direct and to the point. Do not use exclamation points or SMS abbreviations. You should close with something like “Sincerely yours,” or “Best regards,” followed by your name.
6. Honesty and Integrity This is absolutely the wrong class to cheat in. I work very hard to ensure that all students are provided the same opportunity to succeed. The penalty at Vanderbilt for cheating is severe—it is not worth it.

January 12, 2011. Subject to change.

Date	Lecture	Readings & Videos	Quiz	Assignments
Jan 12	Overview of HOD1700			
Jan 14	How We Know What Isn't So			
Jan 19	Sources of Knowledge and Justification for "Knowing"	<i>Global Achievement Gap, Chapter 1</i> (Wagner)	X	Plagiarism Certification
Jan 21	Problems, Variables, & Hypotheses	<i>Concept of Knowledge and How to Measure It</i> (Hunt)	X	
Jan 26	Literature Search Strategies	<i>Obviousness of Social and Educational Research</i> (Gage)	X	
Jan 28	APA Citation & Formatting Tutorial	Optional: <i>APA Online Tutorial</i>		
Feb 2	Measurement: Concepts	<i>Words of Estimative Probability</i> (Wikipedia)	X	Literature Search & APA Formatting
Feb 4	Measurement: Statistics	<i>The Surprising Science of Motivation</i> (YouTube)	X	
Feb 9	Nonexperimental Quant. Research			
Feb 11	Graphical Representations of Data			
Feb 16	Conducting Ethical Research			IRB Certification
Feb 28	Subjects, Participants, & Sampling	<i>The Wine Trials</i> (Goldstein)	X	
Feb 23	Experimental Research Design I	<i>7 Ways to Increase Tips</i> (Lynn)	X	
Feb 25	Experimental Research Design II			
Mar 2	Midterm Review Session			
Mar 4	Midterm Exam			
Mar 9	Spring Break			
Mar 11	Spring Break			
Mar 16	In-Class Demo 1: Quantitative Study			
Mar 18	Lit Review: Purpose and Process	<i>Educational Research: Ch. 3</i>	X	
Mar 23	Critical Review of Research Articles			
Mar 25	Qualitative Research I	CR1: <i>Treatment of Flying Phobia...</i>	X	
Mar 30	Qualitative Research II	CR2: <i>The Effect of Divorce on Sons' Aggression</i>	X	
Apr 1	Interviews: Planning, Implementation, & Analysis	CR3: <i>Midlife Crises of Men</i>	X	
Apr 6	Questionnaires: Planning, Implementation, & Analysis	CR4: <i>Evaluation of Health Maintenance Organizations</i>	X	Literature Review
Apr 8	Enhancing the Credibility of Qualitative Research			
Apr 13	In-Class Demo 2: Qualitative Study			
Apr 15	Analyzing Results and Discussion			
Apr 20	Wrap-Up and Moving Forward			
Apr 22	Final Exam Review Session			Critical Review
Apr 28	Section 1 Final Exam: 3:00 – 4:15	If you choose to take the Final Exam, you must take it with your own section, you may not take it with the other section.		
Apr 29	Section 2 Final Exam: 12:00 – 1:15			
May 2	Section 1 Final Exam: 12:00 – 1:15			
May 4	Section 2 Final Exam: 3:00 – 4:15			Research Project