

LAW 299: PROOF
SPRING 2009
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SYLLABUS

INTRODUCTORY COMMENTS

It is obviously essential for law students to learn about established rules that govern the admissibility and use of evidence in litigation. Evidence may be said to have three major "credentials": relevance, credibility, and probative [inferential] force. As you know, not all relevant and credible evidence, having some potential probative force, is necessarily admissible in litigation. Consequently, a rule-centered study of evidence is a necessary part of legal education. In the past two decades, however, a growing number of legal educators, scholars, and practitioners have questioned whether or not a purely rule-centered approach to the study of evidence is sufficient, particularly for law students who contemplate careers in litigation. There are several reasons why it has been natural to raise this question.

Unfortunately, no evidence comes into existence (in legal or in other contexts) with its relevance, credibility, and probative force credentials already established. These credentials of evidence have to be established by arguments and often by other evidence and judgments of various kinds. Naturally, in any contentious matter there will be disagreement about the extent to which these credentials have in fact been determined. The problem of establishing the credentials of evidence by argument is greatly magnified by the fact that litigation involves masses of evidence. A natural question is: what prior training would a law student normally have received in constructing defensible and persuasive arguments based on a mass of evidence having a wide variety of interesting and subtle properties? Courses we may have taken in logic do not seem to prepare us for the shock of having to construct very complex and often interrelated arguments, based on a mass of evidence, that are both defensible and persuasive. What this course on proof mainly concerns is how to establish what you believe is the meaning of some mass of evidence.

Speaking of persuasion, an attorney faces the task of showing why her/his arguments lead to conclusions that should be accepted at some appropriate standard of proof such as: "beyond reasonable doubt", "balance of probabilities", or "clear and convincing evidence". There is acknowledgment in law and elsewhere that the evidence we encounter has some vexing characteristics: (i) It is always incomplete (we never have all of it); (ii) It is usually inconclusive (it could favor more than one possible conclusion); (iii) It is often ambiguous or imprecise (we can't tell exactly what the evidence says); and (iv) It is dissonant in the sense that some evidence points in one direction and other evidence points in another; (v) It comes to us from sources having every gradation of credibility [shy of perfection]. These characteristics of evidence combine to rule out forensic standards of proof requiring that conclusions in litigation be necessary or beyond a shadow of doubt.

So, there is a distinct element of probability in legal inferences based on evidence. Would it help if law students had one or more prior courses in probability theory or, perhaps, statistics? Unfortunately, undergraduate courses in probability typically involve well-posed and very simple evidential situations. Courses in undergraduate statistics assume replicable processes; i.e., processes that can be repeated over and over again. Litigation usually involves unique, singular, or one-of-a-kind events. Probability and statistics courses rarely, if ever, acknowledge all five of the characteristics of evidence just mentioned above. Furthermore, most modern courses on probability continue to propagate the idea that there is just one view of probability. In coping with evidence having the five characteristics just mentioned more than one view of probability is necessary. There is argument made by very learned jurists that no single theory of probability offers all necessary guidance to legal practitioners and scholars regarding complex inferences based on evidence given at trial or during some other form of settlement.

We now come to the most difficult but also the most interesting element of legal reasoning processes. There are three required ingredients of any inferential reasoning task: hypotheses (or possible conclusions), evidence, and arguments linking evidence and hypotheses. It would be a happy but a posterously unlikely occurrence for an attorney to encounter a situation in which all of these

ingredients were provided at the outset. Where do they come from? The answer is that they are discovered or generated as a result of imaginative or creative thought. It may be common among attorneys to use the term "discovery" only with reference to the legally sanctioned processes by means of which one side in a dispute may obtain evidence from the other. However, if this were the only form of discovery actually undertaken by a lawyer, the resulting catastrophe would be entirely predictable. In short, a lawyer must discover or generate possibilities, evidence, and arguments on her own. There is now emerging a body of scholarship on imaginative reasoning and discovery that deserves careful consideration by anyone whose work requires these related mental activities. This scholarship comes from many different disciplines. The reason is that the discovery or generation of new ideas, evidence, and arguments is the life-blood of persons in many disciplines including law.

But in spite of all the difficulties just mentioned, there are thousands of practicing attorneys who routinely provide their clients with effective representation and wise counsel. How are they able to do this, given the fact that their prior tutoring in logic, probability, discovery, and other related matters was probably no more extensive than your own? One answer is that they have learned many inferential and discovery-related skills as a result of experience involving a fair amount of trial and error. From such experiences come heuristics or rules of thumb that are often quite useful. But trial and error is a rather unpleasant way to learn anything, particularly when the stakes are high, as they usually are in litigation. It happens that many of the skills associated with the discovery and analysis of masses of evidence can be mastered in advance of when they become necessary. But training in establishing these skills requires unconventional courses, such as this one. Scholars and practitioners in the field of law have provided a very rich legacy of experience and scholarship concerning evidence and inference that would be of such great benefit to persons in other disciplines, if they would attend to this legacy. On the other hand, there is scholarship in other disciplines relevant to the discovery and inferential use of evidence in legal affairs. The purpose of this course is to bring together ideas from several disciplines, especially law, that bear upon a variety of evidential and inferential issues of daily concern in any form of litigation. My hope and expectation is that your present access to these ideas will at least reduce the amount of time you might later spend in trying to acquire them by trial and error.

A GUIDED TOUR OF MAJOR TOPICS

Here is a brief look at the major topics to be discussed in this course. At a very general level we have two major classes of issues to discuss. In the first class are issues concerning proof. Here we encounter a variety of difficult matters associated with the task of establishing the relevance, credibility, and probative force "credentials" of evidence items in some emerging mass. Of course you are interested in whether a certain item of evidence is admissible. In this course our focus will be on the task of determining the meaning of this evidence item when it is considered alone or in combination with other evidence you have. Some of the issues we will consider are purely structural in nature and involve the task of constructing often-complex arguments in defense of the relevance and credibility of evidence. Other proof-related matters are probabilistic and concern the task of assessing the probative force of evidence items taken alone or in combination. As we proceed, I will mention several reasons why persons in other disciplines such as logic and probability tend to shy away from the term proof; instead they employ terms such as justification. The reason is that, unless the evidence we have is complete, conclusive, unambiguous, harmonious and perfectly credible, we can never say that we have conclusively proved anything. The structural and probabilistic matters we will discuss all concern the task of justifying the (probabilistic) conclusions we have reached and hope to persuade others to reach.

The second major class of issues concerns the process of discovery or investigation. As I mentioned above, there are three major ingredients of proof or justification: hypotheses, evidence, and arguments linking them. I also mentioned that these ingredients are never supplied for an attorney (or for anyone else facing a proof or justification task). These ingredients have to be discovered, a task requiring imaginative reasoning. As you may know, there are canons, rules, or logics for the deductive and inductive reasoning required in proof or justification. The question is whether or not there can ever be rules or logics for discovery. On most accounts we cannot hope to discover new ideas and evidential tests of them by either deductive or inductive reasoning. A third form of reasoning called abduction has been identified as a possible form of reasoning associated with discovery. As we will discuss, one thing

that makes proof or justification processes so difficult in law and elsewhere is that we routinely face very interesting mixtures of deductive, inductive, and abductive reasoning. Here is a closer look at the major topics we will discuss.

A. Fact Investigation, Discovery, and Abductive Reasoning

In the Preface to their justly-acclaimed work: *Fact Investigation: From Hypothesis to Proof*, [West, 1984 ed.] two contemporary legal educators, David Binder and Paul Bergman, tell us that law students can be excused for believing that "facts" are like "starving trout, ready to be reeled in at the drop of a question or two". The reason they give is that law students are rarely exposed to the variety of interesting and difficult matters associated with the task of generating or discovering the ingredients of proof, which I have identified as hypotheses, evidence, and arguments. As we discuss the process of discovery and the imaginative or "abductive" reasoning it involves, be prepared to encounter ideas that come from many disciplines, some of which you may never even have heard of. Also be prepared to consider ideas that come from the writers of fiction, most notably Sir Arthur Conan Doyle, Umberto Eco, and Arthur Koestler. There are many important ideas about the properties, uses, and discovery of evidence revealed in their works of fiction. As Binder and Bergman's comment suggests, the asking of questions is a key element of discovery. Regarding the evidence we discover, there are two classes of questions that arise. First, we must ask questions about the evidence we have. Answers to such questions help us to establish the relevance, credibility, and probative force "credentials" of the evidence. But we must also ask questions of our evidence. Answers to these questions may inform us about new or further directions our inquiry or fact investigation might take. Both kinds of questions can assist us in generating new hypotheses or possibilities as well as new evidence.

B. Structural Issues I: On the Properties and Inferential Uses of Evidence.

Three of the major topics we will discuss involve structural matters. By "structural" I refer to the construction or layout of arguments to suit various inferential purposes. The arguments we will consider always have many stages. One metaphor we will employ describes an argument as a chain of reasoning having some number of links. Certain links in the chain establish the relevance of the evidence; other links establish the credibility of the evidence. Different forms of evidence require different chains of reasoning. It is here that we first encounter the work of Wigmore on proof-related matters. Most law students encounter Wigmore's work regarding admissibility issues and become familiar with at least parts of his multivolume treatise on evidence. But Wigmore was also a theorist of proof, arguably the most profound and prolific in any discipline. Wigmore's work: *The Science of Judicial Proof* forms the centerpiece for the major textbook we will use in this course.

Wigmore was concerned about establishing the three proof-related credentials of evidence I have mentioned. But he was also concerned about the various uses of evidence during any contentious process. Our discussions here will involve Wigmore's work, several of the Federal Rules of Evidence, and scholarship from other disciplines. Of course we need to pay particular attention to the essential ingredients of an argument. As we will see, these ingredients involve generalizations and backing of these generalizations with a particular species of evidence we will identify as ancillary evidence. Of particular interest will be arguments we might construct to identify specific attributes of the credibility of both tangible and testimonial evidence. As Wigmore and at least a few logicians and probabilists have recognized, any argument or chain of reasoning we construct can never be regarded as uniquely "correct" or "final". By itself, this places some interesting bounds on what we can say about proof or justification.

C. Structural Issues II: Recurrent Forms and Combinations of Evidence.

There are three disciplines known to me in which people must try to make sense out of masses of evidence having any conceivable substance or content; the disciplines are law, history, and intelligence analysis. If evidence varies substantively in a near-infinite way, how is it possible to say anything general

about evidence, its properties, and its uses? Fortunately, as far as proof/justification is concerned, there appears to be a finite and manageable collection of logically distinguishable forms of evidence. Wigmore, and before him Jeremy Bentham, began to think about what these forms might be. Wigmore claimed that there are just three basic forms of evidence, which he labeled: testimonial, circumstantial, and autoptic preference (a quaint term Wigmore used with reference to any observable evidence given at trial). But Wigmore's scheme for categorizing evidence has some distinct faults. I will show you another categorization scheme in which necessary and subtle distinctions can be preserved in ways that Wigmore's tripartite scheme does not allow. We never establish proof from a single item of evidence; we have masses of it to contend with, as I have mentioned. It happens, however, that there are certain recurrent combinations of evidence whose recognition allows us to state arguments with much greater precision. Study of identifiable forms and combinations of evidence may seem uninteresting. However, such study alerts us to a very wide array of evidential subtleties or complexities that lurk just below the surface of even the "simplest" of inference tasks. Having knowledge of these subtleties often pays handsome dividends. The proof or justification tasks of concern to lawyers are very good examples of instances in which it is true that what we do not recognize or take into account can hurt us, often very badly.

D. Structural Issues III: The Analysis and Synthesis of Masses of Evidence.

Confronted with an emerging mass of evidence on some possible conclusions, we might try to make sense out of it holistically or all at once in our heads. To do this effectively would require us to keep many things in mind all at the same time. This is a task most of us find quite impossible to perform. An alternative is to take this complex task and decompose it into an array of simpler tasks. On occasion this process is called divide and conquer. Wigmore, for one, believed a divide and conquer strategy is one that an attorney, preparing for trial or other form of settlement, must employ in order to avoid later catastrophes; his essential reasons are as follows.

Attorneys construct arguments from evidence and one thing certain is that opposing attorneys will, often ruthlessly, attempt to decompose these arguments in order to show their weaknesses. How much better it would be, Wigmore argued, to lay out one's arguments in advance and in fine detail so that any weaknesses that exist may at least be recognized and possibly remedied. In constructing a chain of reasoning from evidence to hypotheses, each link we identify represents a possible source of doubt. Better to identify these sources of doubt yourself than to have your opponent do it later on. But Wigmore was also concerned about the process of "putting all the pieces back together again" so that a final conclusion can be recommended. For this purpose he developed an interesting charting scheme that initially never found favor among the legal audiences for which it was intended. But it has found considerable favor among persons in law and in other disciplines for reasons we will discuss. In addition, there are ways of performing Wigmorean analyses of complex masses of evidence using computer facilities that Wigmore never dreamed of having. In class we will consider elements of computer-assisted Wigmorean argument structuring.

E. Marshalling Thought and Evidence for Fact Investigation and Trial Preparation.

Fact investigation and other pretrial/pre-settlement activities proceed over time; we rarely have everything we need all at once. New evidence is generated in response to questions we ask and as we entertain new or revised possibilities. As a result, we are forced to revise arguments we have made. In a word, the world of the attorney is nonstationary. In the face of such flux or change, how are we to marshal or organize our thoughts and our evidence in ways that enhance the process of fact investigation and trial/settlement preparation? Similar questions are now being asked by persons in many different disciplines. In Section A above, I mentioned the process of discovery, the imaginative reasoning it involves, and how it is related to the asking of questions. It would certainly be nice to have access to a computer that could tell us which questions to ask as the process of discovery unfolds. A computer with such capabilities does not now exist and there are very good reasons for believing that such a computer can never exist. However, there are ways of organizing our thoughts and our evidence, possibly with computer assistance, that are heuristically valuable in the sense that they stimulate us to ask important

questions as discovery proceeds. How well we marshal thoughts and evidence we do have determines how easily we will generate new ideas and new evidence we do not have, but possibly ought to have. In this part of the course we will discuss various ways for organizing thought and evidence during fact investigation and later during the process of proof at trial.

F. Drawing Conclusions: Probability and the Weighing of Evidence.

Last, but certainly not least, we come to the very difficult process of drawing conclusions from a mass of evidence. As noted earlier, these conclusions must be "hedged" probabilistically by virtue of the five vexing properties of the evidence mentioned above. The relationship between the disciplines of law and probability might best be described as an initial flirtation followed much later by an "off again - on again romance". The flirtation dates from the early 1600s. One trouble is that probabilists are divided about what a probability means in the first place. Today they are especially divided about what is meant by the probative force, strength, or weight of evidence. This controversy has spilled over into the field of evidence law leading to what have become known as the "probability debates" in law. In spite of their differences, probabilists and many scholars of evidence in law have much to tell us about the force of evidence items considered alone and in combination. We will examine what different views of the probative force of evidence have to tell us about drawing conclusions from incomplete, inconclusive, ambiguous, dissonant, and not perfectly credible evidence.

Law students, like many others, differ widely in the extent to which they either fear or loath mathematical expressions such as those encountered with reference to probability. My major task will be to take fear and/or loathing out of the examination of some mathematics that turns out to be very informative about the task of assessing the probative force of different forms and combinations of evidence. What probabilists have to tell us about the force of evidence can often be expressed in words and in pictures. As we proceed, you will discover that probability is actually more about arguments than it is about numbers.

But using numbers we can tell lots of interesting "stories" about the evidence and about the sources from which it comes. The few equations I will tell you about will simply tell us what the ending of these stories might be as far as the probative force of their evidence is concerned. To allay any anxiety on your part, you will never be required at any time during this course to do any probability calculations. This is my job. Your task will simply be to judge how valuable you believe these stories are in assisting us to find out more about the subtleties in evidence.

THE TEXT AND OTHER REFERENCES

In this course there will be several major sources of information for you to draw upon.

1) Major Text: Since 1993 when I first offered this course, I used a book by Professors Terence Anderson and William Twining entitled: *Analysis of Evidence: How to Do Things with Facts Based on Wigmore's Science of Judicial Proof*. I have been so privileged to have had Professors Anderson [Miami (Fla) School of Law] and Twining [University College London School of Law] as colleagues for the past 28 years. I will tell you more about them as I proceed. They are both world-renowned evidence scholars, legal educators and practitioners. I was so happy when they asked me to be a co-author of a revised edition of this book, now titled: *Analysis of Evidence. 2nd edition* [Cambridge University Press, 2005; paperback]. This is a book written for law students that covers most of the topics mentioned above. Specific reading assignments in this book appear below. Both Anderson and Twining offer four-hour classes on proof. One result is that there is more in this book than I am comfortable in covering in our two-hour course. So I will not cover all of the topics in this revised edition. You should, however, read the whole thing when you have a chance; there are so many valuable topics in this book that should be of concern to you.

I must tell you about a long-standing aversion I have to collecting royalties on books I have written and that I ask my students to purchase. On two previous occasions on which I have done this, I

have always refunded the amount of royalty I received from each student. In the case of *Analysis of Evidence*, however, I expect that I will receive about \$1.50 for each copy. I could write you a check for \$1.50, which is one way I could return this royalty to you. But I also know that there are several student assistance funds at GMU Law School to which I could contribute the royalty I receive. Talking with our Dean, I found out about a fund that is established to assist students. I began three years ago to contribute my royalty on this book to this fund along with a further contribution. So, with your approval, I will contribute the royalty again this year to this same fund.

2) Class Notes: My hope is that each class will be a conversation we will have about the properties, uses, and discovery of evidence. I am prepared to generate this conversation but I would certainly not enjoy monopolizing it. In classes I took, I could never listen, ask questions, participate in discussion, and take notes all at the same time. I will provide you with notes on every topic we will discuss in class so that you can devote your whole attention to the discussions we will have. I will always provide you with these notes in advance of the class in which their substance is discussed. These notes will also contain additional examples that illustrate various topics. Finally, be assured that I will not stand up in front of class each day and read the notes I have given you. This would be a crime against nature and an insult to your sensibilities. The class notes I give you will, I hope, serve to get our discussions started. My major objective in our class sessions is to draw ideas out of you. Your questions and comments in class are so important to all of us. As you will see, there are few things set in stone about the process of proof based on masses of evidence.

3) Law Reviews and Other Periodicals: As we proceed, I will ask you to read a small number of articles drawn from law reviews and other sources. Most of these articles are quite short and I will have them photocopied for you.

SCHEDULE OF EVENTS AND TEXT ASSIGNMENTS

To the greatest extent possible our discussions in class will follow the sequence of topics in your text. It is very helpful if discussions in class seem to correspond with what you are reading. We have a total of 14 two-hour classes. Here is a listing of the topics we will cover, the tentative time assigned to each, and the reading assignments relevant to each topic.

A. Fact Investigation, Discovery, and Imaginative Reasoning [13 - 27 January]

Analysis of Evidence: Preface [xvii - xxiv]

Chapter 1 [1 - 45], I will have some suggestions for you about the examples in this chapter that you might read; there are lots of them and you don't have to read them all.

Chapter 2 [46 - 60]

B. Structural Issues I: On the Properties and Inferential Uses of Evidence [3 - 10 February]

Analysis of Evidence: Chapter 2 [60 - 71]

C. Structural Issues II: Recurrent Forms and Combinations of Evidence. [17 - 24 February]

Analysis of Evidence: Chapter 2 [71 - 77]

D. Structural Issues III: The Analysis and Synthesis of Evidence. [3 - 24 March] Note: No class on 10 March; it's Spring Break.

Analysis of Evidence: Chapter 3 [78 - 111].

Chapter 4 [112 - 122].

Chapter 5 [123 - 144].

Chapter 10: [262 - 288]

E. Marshaling Thought and Evidence for Fact Investigation and Trial Preparation.
[31 March - 12 April]

Analysis of Evidence: Chapter 6 [145 - 158]

Analysis Of Evidence: Chapter 7 [159 - 223]. This chapter is optional reading;
I have another complex case I will tell you about.

F. Drawing Conclusions: Probability and the Weighing of Evidence. [14 - 21 April]

Analysis of Evidence: Chapter 8 [224 - 245].

Analysis of Evidence: Chapter 9 [246 - 261]

METHOD OF EVALUATION

Your grade for this course will rest upon: (i) class participation in the form of "law firm" exercises which I will describe, (ii) two graded take-home assignments, and (iii) a final written examination. Regarding your class participation, I will have an assortment of assignments for you that will involve opposing "law firms" whose members debate about whether or not the credentials of certain collections of evidence have been appropriately established. I cannot stress too strongly how important it is to have practice in constructing arguments in defense of the relevance, credibility and probative force of evidence. These exercises are designed to give you such practice.

At our first meeting on 13 January, I will tell you how we will form these law firms. The graded assignments will be given out on (approximately) 17 March and 7 April. These two assignments can be performed by your law firm. Your law firm has a week to complete each one. I will tell you more about these two assignments as we proceed. The final written examination will cover the entire course. Asked to state the weights I will apply to these three kinds of evaluation, I would say: 10% for class participation, 50% for the two graded assignments, and 40% for the final examination.

ABOUT YOUR INSTRUCTOR

The house of evidence has many mansions. In other words, people in many different disciplines have contributed to our understanding of the properties, uses, and discovery of evidence. Until about fifteen years ago, I was an uninvited guest in the mansion of evidence scholarship in law. I began to visit this mansion many years ago for the sole purpose of being enriched by the rich legacy of scholarship and experience on evidence that is housed in this mansion. In class I will tell you briefly about why I first visited the mansion of evidence law and how I encountered the work of Wigmore and other legal scholars on evidence and inference, including Professors Anderson and Twining. But now I am an invited guest in the mansion of evidence scholarship in law. My invitation entitles me to tell you what I have found out about evidence in all of the mansions I have visited. It does not entitle me to tell law students or legal scholars and practitioners what they ought to believe about evidence and how they ought to conduct their business. I have no credentials for such a task.

My essential task is to help you to become enthusiastic about study of a variety of evidential and inferential issues you will later encounter in the practice or further study of law. I will do all I can to make this course a profitable and enjoyable experience for you. As this course proceeds, if you have any

unhappiness about the course concerning such matters as its relevance to your needs or whether it is suitably challenging, please let me know. I will welcome your suggestions about how the course might be improved. I have indeed responded to comments made by students during the previous occasions on which this course has been offered at the GMU law School.

Although I teach just this one course in the GMU Law School, I am a member of the full-time faculty. The rest of the time I teach courses in the Engineering School out in Fairfax. Here is what my schedule will look like this Spring Semester. I will be at the Law School for sure on Tuesdays. I will appear on demand at other times except on Wednesdays (I have another class that meets Wednesdays). You are most welcome to contact me at any time if you have questions or problems with this course. Here is where I am to be found:

Law School: Room 402.

Fairfax Campus: Room 111A, Science & Technology II, Phone 703-993-1694

Home: Phone 703-698-9515. Never hesitate to call me at home if you cannot reach me at the other locations.

E-mail: Preferred: <dschum398@earthlink.net>, also <dschum@gmu.edu> but this is not always working.