Fundamentals of Bayesian Epistemology

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Professor

Branden Fitelson
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Office: Gateway Building, Room 513
Hours: Thursdays 12–2pm

Time & Place

FH–B1
2:50–4:10pm
Tuesday/Thursday

Readings

All readings for the course will be provided on this webpage. I will use a variety of sources, which will be made freely available here. Some of these will be static documents (in HTML or PDF format), and some will be more interactive documents with exercises, etc. I will also supplement the online texts with my own handouts. You will need Acrobat Reader to read the PDF files on this website.

The required readings will all be drawn from a textbook-in-progress (Fundamentals of Bayesian Epistemology), which is being written by Mike Titelbaum.

I will also be posting some optional/background readings for each of the chapters of the text. In general, the schedule will evolve as the semester unfolds. Because this is the first time the textbook is being used, we'll see how long it takes us to get through the material. Stay tuned...

- **Unit #1: Beliefs and Degrees of Belief**
  - Required Reading
    - Titelbaum, Chapter 1 of Fundamentals of Bayesian Epistemology
  - Optional/Background Readings
    - Foley, Beliefs, Degrees of Belief, and the Lockean Thesis
    - Christensen, Two Models of Belief [Chapter 2 of his Putting Logic in its Place]

- **Unit #2: Probability Distributions**
  - Required Reading
    - Titelbaum, Chapter 2 of Fundamentals of Bayesian Epistemology
  - Optional/Background Readings
    - Hardegree, Truth-Functional Connectives / Validity in Sentential Logic
    - Hacking, Elementary Probability Ideas of [Chapter 4 of his An Introduction to Probability and Inductive Logic]
    - Fitelson, A Decision Procedure for Probability Calculus with Applications
      - PrSAT Webpage

- **Unit #3: Conditional Credences**
  - Required Reading
    - Titelbaum, Chapter 3 of Fundamentals of Bayesian Epistemology
  - Optional/Background Readings
    - Hacking, Conditional Probability of [Chapter 5 of his An Introduction to Probability and Inductive Logic]
    - Skyrms, The Probability Calculus [Chapter 6 of his Choice and Chance]
    - Lewis, Probabilities of Conditionals and Conditional Probabilities
* Arntzenius, Reichenbach's Common Cause Principle

**Participation**

You should come to class with (at least) two questions regarding the readings (at least one philosophical question and at least one formal/technical question). And, you should always be prepared to discuss the readings in class. Your participation in class will be worth 10% of your final grade.

**Homeworks**

Every other week (on Thursday, beginning on 9/4), I will assign a homework which you will have two weeks to complete. The assignments will, generally, be drawn from the text. Here is a schedule of those assignments. The homeworks will be worth 40% of your final grade. No late homeworks will be accepted (except in very rare circumstances), but we will drop your lowest HW score. Here is a schedule of the HWs. Stay tuned — this will evolve as the semester unfolds.

- **HW #1** (assigned 9/4/14, due 9/18/14).
- **HW #2** (assigned 09/18/14, due 10/2/14).
- **HW #3** (assigned 10/2/14, due 10/16/14).
- **HW #4** (assigned 10/16/14, due 10/30/14).
- **HW #5** (assigned 10/30/14, due 11/13/14).
- **HW #6** (assigned 11/13/14, due 12/4/14).

**Mid-Term Exam**

The mid-term exam will be held in-class on Tuesday, October 21, 2014. The mid-term will be worth 25% of your final grade.

**Final Exam**

The final exam will be held (in the usual class location: FH–B1) on Monday, December 22, 2014 from 12–3 PM. The final will be worth 25% of your final grade.