

Psychology 330

Thinking

Winter 1991

Professor: Dr. Deborah Frisch x6-4959

Office Hours: 325 Straub

Tuesday 11:30 - 12:30; Thursday 2:00-3:30 or by appointment

<u>Date</u>	<u>Topic</u>	<u>Readings</u>
Jan 8	Introduction	Neimark Ch. 1
Jan 10	What is "Good Thinking?"	Stanovich 1-4
Jan 15	Logical (Deductive) Reasoning	Neimark Ch. 5-7
Jan 17	Errors in Logical Reasoning	Feynman Part I
Jan 22	Correlation and Causality	Stanovich Ch.5, Neimark Ch. 8
Jan 24	Hypothesis Testing	Stanovich Ch. 6-8, Neimark Ch. 9
Jan 29	Biases in Hypothesis Testing: Stereotypes	Feynman Part II
Jan 31	Probability and Statistics	Stanovich Ch. 9-10
Feb 5	Errors in Probabilistic Thinking	
Feb 7	MIDTERM EXAM	All of Stanovich; Neimark 1, 5-9
Feb 12	Problem Solving	Neimark Ch. 10 Feynman Part III
Feb 14	Creativity	Neimark Ch. 12
Feb 19	Decision Making: Overview	Neimark Ch. 11 Feynman Part IV
Feb 21	Biases in Decision Making	
Feb 26	Improving Decision Making	Feynman Part V
Feb 28	Moral Decisions	
Mar 5	Sex Differences in Thinking	
Mar 7	Summary and Review	

Reading:

Stanovich, K. E. How to Think Straight About Psychology

This book describes scientific thinking in psychology. It will give you an idea about how psychologists approach problems. Many of the ideas also can be applied to issues that arise in everyday life.

Neimark, E. D. Adventures in Thinking

This book provides an overview of different types of thinking.

Feynman, R. P. Surely You're Joking, Mr. Feynman

Richard Feynman was a Nobel prize winning physicist. This book contains anecdotes about his life that illustrate his critical thinking about many different topics.

The following chapters in Feynman are especially relevant:

Part I:

He Fixes Radios By Thinking!
Always Trying to Escape

Part II:

Surely You're Joking, Mr. Feynman
Mixing Paints
A Different Box of Tools
Mindreaders

Part III:

Testing Bloodhounds
Safecracker Meets Safecracker
Uncle Sam Doesn't Need You

Part IV:

The Dignified Professor
Certainly, Mr. Big!
An Offer You Must Refuse

Part V:

It Sounds Greek to Me
Is Electricity Fire?
Altered States
Cargo Cult Science

Grading: Your grade is based on two exams - the exam you do better on counts 60%, the other one counts 40%.

Extra credit: There will be three short extra credit assignments. In order to receive extra credit, you must do all three assignments. If you do all three, your grade will be raised 1/2 a letter grade (B- --- B; B --- B+; B+ --- A-; etc.).