

Final Thesis Preparation (FTP) - Vorbereitung von Abschlussarbeiten (VBA)

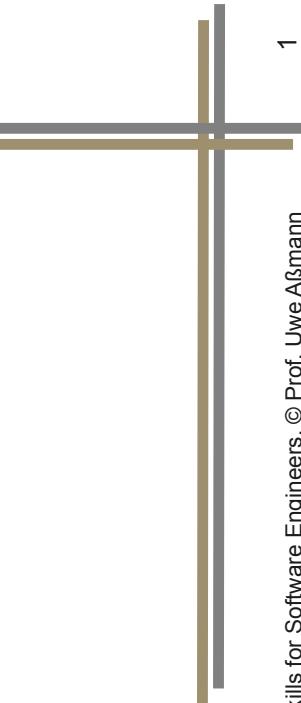
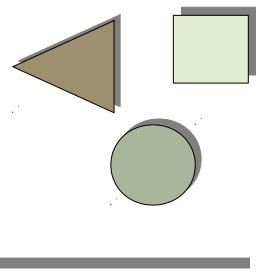


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<http://st.inf.tu-dresden.de/teaching/vba>



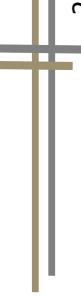
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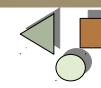
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Outline of the Course



Production

Writing essays

Structuring and Argumentation

Problem Solving

Information gathering

Overview

OISDR research process



Problem solving

Controlling ideas

Research reports

3

Knowledge and Science...



Es gibt bekanntes Wissen. Das sind Sachen, von denen wir wissen, dass wir Sie wissen.

Es gibt bekanntes Unwissen. Das bedeutet, es gibt Sachen, von denen wir wissen, dass wir sie nicht wissen.

Aber es gibt auch unbekanntes Nichtwissen. Das sind Sachen, von denen wir nicht wissen, dass wir sie nicht wissen.

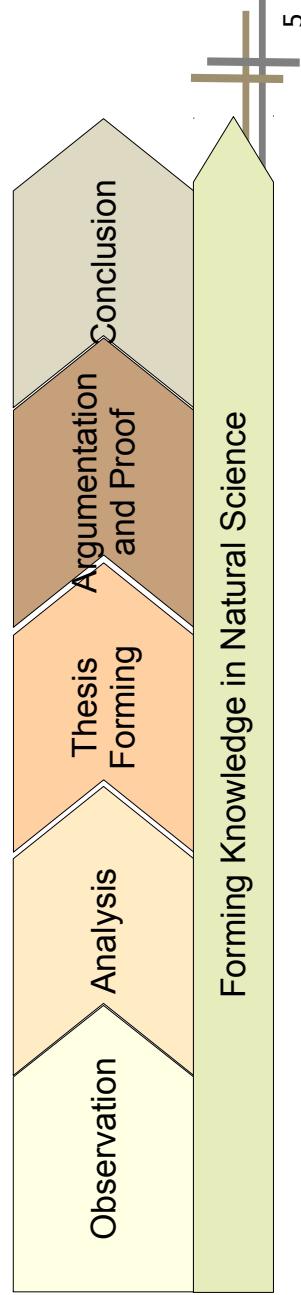
► Donald Rumsfield



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Rules of Deduction (*Schlussregeln*)

- ▶ Open World Assumption (OWA)
 - ▶ „alles, was ich nicht weiß, könnte wahr sein“
- ▶ Closed World Assumption (CWA)
 - ▶ „alles, was ich nicht weiß, ist falsch“
- ▶ Closed Domain Assumption (CDA)
 - ▶ „alles, was ich in diesem Kontext nicht weiß, ist in diesem Kontext falsch“



Important Literature - Writing

- ▶ [Bünting] Karl-Dieter Bünting. Axel Bitterlich, Ulrike Pospiech. Schreiben im Studium. Ein Trainingsprogramm. Cornelsen-Scriptor.
- ▶ [Parks] A. Franklin Parks, James A. Levernier, Ida Masters Hollowell. Structured Paragraphs and Essays. Bedford/St. Martins. (A wonderful basic book about writing.)
- ▶ [Schaum] Molly McClain, Jacqueline D. Roth. Schaum's Quick Guide to Writing Great Essays. McGraw-Hill.
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- ▶ Mike Market. Technical Communication, free book. 10th Edition. Bedford St Martin's. http://www.ebook3000.com/Technical-Communication--10th-Edition_173076.html
- ▶ [Turner] Adam Turner. English Solutions for Engineering and Sciences Research Writing: A guide for English learners to publish in international journals. English Writing Lab Center for Teaching and Learning and College of Engineering, Hanyang University, Seoul, Korea
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- ▶ [BWC] Wayne C. Booth, Joseph M. Williams, Gregory G. Colomb. The Craft of Research. The University of Chicago Press.
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- ▶ [Scherer] Hermann Scherer. 40 Minuten für eine gezielte Fragetechnik. Gabal Verlag

Literature: Writing Research Papers

- ▶ [Gonzalez] Fabio A. Gonzalez. Writing a Research Paper Depto. de Ing. de Sistemas e Industrial Universidad Nacional de Colombia, Bogota

Literature: Science and Research

- ▶ [RomEnd] Albert Endres, Dieter Rombach. A Handbook of Software and Systems Engineering. Empirical Observations, Laws, and Theories. Pearson.
- ▶ [Töpfer] Klaus Töpfer. Erfolgreich Forschen. Springer. 2008. This is a book from Dresden (Wirtschaftswissenschaft) about Research in the Economics, mostly about empirics.

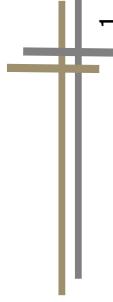
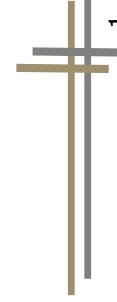
Excellent Writers Writing Books about Excellent Scientists

- ▲ English and German
 - Dava Sobel. Longitude (Longitude). A wonderful book about John Harrison, the maker of the H-3, the first precise clock in the world
 - [Sobel-Galileo] Dava Sobel. Galileis Tochter. (Galileo's Daughter). Wonderful book about Galileo and the letters of his daughter. If you want to understand the inquisition..
 - [Singh-Wiles] Simon Singh. Fermat's Last Theorem. Fourth Estate. Wonderful book about the mathematician Andrew Wiles, proving Fermat's last theorem in 7 years and 120 pages.
 - Fermats letzter Satz. dtv.

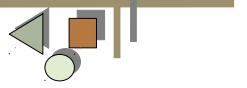


Excellent Writers and Books about Excellent Scientists

- ▲ German only
 - [SchmEin] Helmut Schmidt. Einmischungen. Goldmann-Verlag. From Schmidt, you can read everything, and you learn a lot.
 - [SchAD] Helmut Schmidt. Außer Dienst. Pantheon-Verlag.
 - [SchW] Helmut Schmidt. Weggefährten. Pantheon-Verlag.
 - [SchmidtMoral] Helmut Schmidt. Auf der Suche nach einer öffentlichen Moral. Deutschland vor dem neuen Jahrhundert. Goldmann.
 - [SchKanz] Helmut Schmidt. Kanzlerjahre. Pantheon-Verlag.
 - [ConteJalta] Arthur Conte. Die Teilung der Welt. Jalta 1945. dtv 1967
- ▲ English only
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Excellent Writers, German and English



- ▶ [Craig-Army] Gordon Craig. Die preußische Armee. Staat im Staate.
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- ▶ [Craig-Germans] Gordon Craig. The Germans, Meridian.
 - Über die Deutschen. C.H.Beck-Verlag.
- ▶ [Craig-Germany] Germany 1866-1945. Oxford University Press.
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- ▶ [Abbot-Airplanes] Willis J. Abbot. Aircraft and Submarines. The Story of the Invention, Development, and Present-Day Uses of War's Newest Weapons. 1918
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- ▶ [Assmuss] Eduard Assmuss. Parasiten der Honigbiene und die durch dieselben bedingten Krankheiten dieses Insects.
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- ▶ [Abbe] Ernst Abbe. Gesammelte Abhandlungen III. Vorträge, Reden und Schriften sozialpolitischen und verwandten Inhalts Editor: S. Czapski
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- ▶ [Abbot-Appeal] Francis Ellingwood Abbot. A Public Appeal for Redress to the Corporation and Overseers of Harvard University. Professor Royce's Libel.
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- ▶ [Bernstein] Eduard Bernstein. Der Sozialismus einst und jetzt. Streitfragen des Sozialismus in Vergangenheit und Gegenwart
<http://www.gutenberg.org/cache/epub/24523/pg24523.txt>
- ▶ [Guedalla] Philip Guedalla. Some Historians. In: Modern Essays. Editor: Christopher Morley. <http://www.gutenberg.org/3/8/2/8/38280/>



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- ▶ [Russell-Bolshevism] Bertrand Russell. The Practice and Theory of Bolshevism, 1920 <http://www.gutenberg.org/1/7/3/5/17350/>
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- ▶ [Stresemann] Gustav Stresemann. Die Entwicklung des Berliner Flaschenbiergeschäfts. Inaugural-Dissertation, Universität Leipzig, 1900 <http://www.gutenberg.org/cache/epub/33418/pg33418.txt>
- ▶ [Treitschke] Heinrich von Treitschke: Die Gründung des Deutschen Zollvereins. <http://www.gutenberg.org/files/23065/23065-0.txt>
 - Achtung. Treitschke schreibt gut, aber er disqualifiziert sich durch seinen Antisemitismus http://de.wikipedia.org/wiki/Heinrich_von_Treitschke



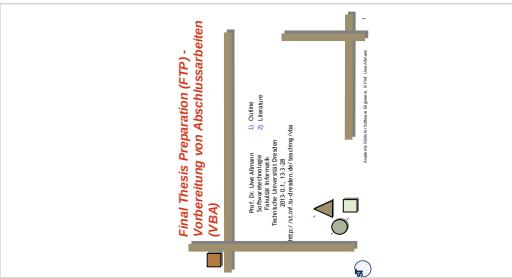
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- ▶ [VannevarBush] Vannevar Bush. As We May Think. First published in The Atlantic Monthly, July 1945. This web edition published by eBooks@Adelaide. <http://ebooks.adelaide.edu.au/b/bush/vannevar/as-we-may-think/>



Examples from American Scholar

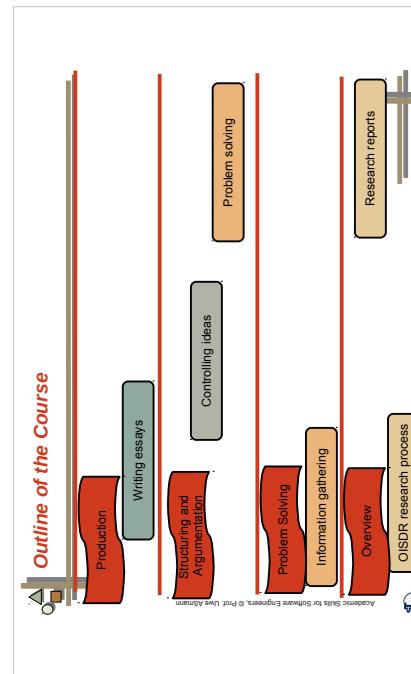
- ▶ www.americanscholar.org contains a lot of accessible essays about many different topics.



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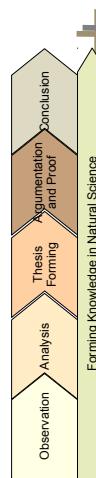
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Donald Rumsfeld

4

Rules of Deduction (Schlussregeln)

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Important Literature - Writing

- [Buning] Karl-Dieter Bunting, Axel Bitterlich, Ulrike Pospiisch. Schreiben im Studium.
Ein Trainingsprogramm. Cornelsen-Scriptor.
- [Parks] A. Franklin Parks, James A. Levenier. *100 Masters' Structured Paragraphs and Essays*. Bedford/St. Martin's. (A wonderful basic book about writing.)
- [Schaum] Molly McClain, Jacqueline D. Roth. *Schaum's Quick Guide to Writing Great Essays*. McGraw-Hill.
- [Pellegrino] Victor C. Pellegrino. *A Writer's Guide to Powerful Paragraphs*. Maui Artthoughts Company, Hawaii.
- [Ross] Bruce Ross-Larson. *Powerful Paragraphs*. W. W. Norton.
- [WICo] Joseph M. Williams, Gregory G. Colomb. *Style – Toward Clarity and Grace*. The University of Chicago Press.
- [Roten/Bendl] *Your Companion to English Texts. Comprehension Analysis Appreciation Production*. Marz-Verlag, 1978

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Other Literature

- [SGHM08] Dirk Siepmann, John D. Gallagher, Mike Hannay, and J. Lachlan MacKenzie. *Writing in English: A Guide for Advanced Learners*. Number 3124 in UBT. A. Francke, 2008.
- Mike Marker, technical Communication, free book 10th Edition. Bedford/St. Martin's, http://www.ebook3000.com/technical-Communication--10th-Edition_17307.htm
- [Turner] Adam Turner. *English Solutions for Engineering and Sciences Research Writing*. A guide for English learners to publish in international journals. English Writing Lab Center for Teaching and Learning and College of Engineering, Hanyang University, Seoul, Korea
– www.hanyang.edu/~ogw/

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Literature - Argumentation

- [BWC] Wayne C. Booth, Joseph M. Williams, Gregory G. Colomb, *The Craft of Research*, The University of Chicago Press.
- [Thiele] Albert Thiele, *Die Kunst zu überzeugen. Faire und unfaire Dialektik*, Springer.
- [Leichen] R. Leicher, *Verkaufen, TaschenGuide*, Haufe-Verlag.
- [Schereif] Hermann Scherer, *40 Minuten für eine gezielte Fragetechnik*, Gabai Verlag

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Literature: Writing Research Papers

- [Gonzalez] Fabio A. Gonzalez, *Writing a Research Paper Dep. de Ing. de Sistemas e Industrial Universidad Nacional de Colombia, Bogotá*

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Literature: Science and Research

[RomEnd] Albert Endres, Dieter Rombach A Handbook of Software and Systems Engineering. Empirical Observations, Laws, and Theories. Pearson.

[Topfert] Klaus Topfert, Erfolgsreicher Forschen. Springer 2008. This is a book from Dresden (Wirtschaftswissenschaft) about Research in the Economics,

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- Dava Sobel, Longitude (Longitude: A wonderful book about John Harrison, the maker of the H-3, the first precise clock in the world (Sobel-Galileo) Dava Sobel Galileo's Daughter. (Galileo's Daughter). Wonderful book about Galileo and the letters of his daughter, if you want to understand the inquisition..
- (Stigler-Wiles) Simon Singh, Fermat's Last Theorem. Fourth Estate, Wonderful book about the mathematician Andrew Wiles, proving Fermat's last theorem in 7 years and 120 pages.
- Fermat's letzter Satz . dtv.

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- (Schw) Helmut Schmidt. *Wege zu einer Deutschen Ethik*. Pantheon-Verlag
 - Schmidt/Moral. Schmidt. Auf der Suche nach einer öffentlichen Moral. Deutschland für den neuen Jahrhundert. Goldmann.
 - (Sachkanz) Helmut Schmidt. Kanzlerjahr. Pantheon-Verlag.
 - (Conte/Jah) Arthur Conte. Die Teilung der Welt. Jahn 1945. dV 1987

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- [Craig-Amy] Gordon Craig, Die preußische Armee. Staat im Staate. Athenäum Drosste Taschenbücher Geschichte 1890.
 - The Politics of the Prussian Army, Oxford University Press.
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[Sieveking] H. Sieveking. Moderne Probleme der Physik. TU Karlsruhe, 1913

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* Achung. Treitschke schreibt gut, aber er disqualifiziert sich durch seinen Antisemitismus



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[VannevarBush] Vannevar Bush. As We May Think. First published in The Atlantic Monthly, July 1945. This web edition published by eBooks@Adelaide . http://ebooks.adelaide.edu.au/b/bush/vannevar/as-we-may-think/

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