

The List of Instructional Webpage Links:

References of the internet links used in the online version of visual wheel of duality in consumer theory in order to provide more information on its components and their linkages:

1. DUF

Wikipedia

https://en.wikipedia.org/wiki/Utility#Utility_functions

U of Minnesota

<http://staff.apec.umn.edu/nzeitoun/Ch3-3.pdf>

Boston College

<https://www2.bc.edu/~unver/teaching/intermicro/EC201-slide3.pdf>

Wikipedia

https://en.wikipedia.org/wiki/Category:Utility_function_types

2. BC

Wikipedia

https://en.wikipedia.org/wiki/Budget_constraint

U of Texas

<http://www.laits.utexas.edu/~anorman/05/consumer.html>

Brown U

<http://www.econ.brown.edu/~rvohra/econ1130/budget.pdf>

U of Colorado

http://www.colorado.edu/economics/morey/2010/Lectures/2010_Lecture-BudgetConstraints.pdf

Boston College

<https://www2.bc.edu/~unver/teaching/intermicro/EC201-slide1.pdf>

UCSB

<https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=23&ved=0CDEQFjACOBQoTCI6JnfKpzccCFQyKDQodatANoA&url=http%3A%2F%2Fwww.econ.ucsb.edu%2F~tedb%2FCourses%2FEc100AF02%2FPFSlides%2FCh2.ppt&ei=6iPhVY7sF4yUNuqgt4AK&usq=AFQjCNG1TpPimUieqS4JDrizOvta08SutQ&sig2=p2spFySzEeDgp0fO5iiI4g&cad=rja>

Chennai Mathematical Institute

<http://www.cmi.ac.in/~shreyas/ECO/Lecture03.pdf>

3. Utility Maximization Problem

Wikipedia

https://en.wikipedia.org/wiki/Utility_maximization_problem

U of Minnesota – Duluth

<http://d.umn.edu/~watanabe/econ460su10/doc/umpho.pdf>

Ohio State U

<http://www.econ.ohio-state.edu/jpeck/Econ501aL4.pdf>

Simon Fraser U

<http://www.sfu.ca/~wainwrig/mpp/mrs-notes.pdf>

U of Maryland

<http://econweb.umd.edu/~kaplan/courses/intmicrolecture5.pdf>

U of Massachusetts

<http://people.umass.edu/resec712/pdfs/Lecture%20%20Consumer%20Theory.pdf>

Willman.com

<http://willmann.com/~gerald/mikro1-01/lecnotes2.pdf>

4. H-W Id.

USDA.gov

<http://www.ers.usda.gov/media/1773170/tb1883b.pdf>

Penn State U

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.362.6621&rep=rep1&type=pdf>

EditorialExpress.com

https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=ESAM07&paper_id=79

NC State U

<http://www4.ncsu.edu/~palmq/HedonicHandbookChapter.pdf>

5. HIDEF

Core.ac.uk

<http://core.ac.uk/download/pdf/6269513.pdf>

USDA.gov

<http://www.ers.usda.gov/media/1773170/tb1883b.pdf>

Penn State U

<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.362.6621&rep=rep1&type=pdf>

EditorialExpress.com

https://editorialexpress.com/cgi-bin/conference/download.cgi?db_name=ESAM07&paper_id=79

NC State U

<http://www4.ncsu.edu/~palmq/HedonicHandbookChapter.pdf>

6. HIDF vs. MDF

----- **Not available yet!**

7. MDF

Wikipedia

https://en.wikipedia.org/wiki/Marshallian_demand_function

Iowa State U

<http://www2.econ.iastate.edu/classes/econ501/Hallam/documents/FunctionalForms.pdf>

William & Mary

http://njsanders.people.wm.edu/100A/Deriving_Demand_Functions_Examples.pdf

Metro State U

<http://faculty.metrostate.edu/BELLASAL/352/Lec05.pdf>

U of Colorado

<http://www.colorado.edu/economics/morey/6808/hicksian.pdf>

8. MDF to DUF

----- **Not available yet!**

9. MDF to IUF

Wikipedia

https://en.wikipedia.org/wiki/Indirect_utility_function

Princeton

<http://www.princeton.edu/~dixitak/Teaching/MicroHighCalculus/Notes&Slides/Lec04.pdf>

Queen's University

http://qed.econ.queensu.ca/faculty/hfsun/files/econ310_2015w_notes4.pdf

U of Alabama

http://bama.ua.edu/~mjvanessen/Econ508_Demand.pdf

10. IUF

Princeton

<http://www.princeton.edu/~dixitak/Teaching/MicroHighCalculus/Notes&Slides/Lec04.pdf>

Iowa State

<http://www2.econ.iastate.edu/classes/econ501/Hallam/documents/FunctionalForms.pdf>

U of Florida

<http://plaza.ufl.edu/cpiette/Semester1/Micro03c.pdf>

Metro State U

<http://faculty.metrostate.edu/BELLASAL/352/Lec05.pdf>

U of Alabama

http://bama.ua.edu/~mjvanessen/Econ508_Demand.pdf

Queen's University

http://qed.econ.queensu.ca/faculty/hfsun/files/econ310_2015w_notes4.pdf

11. Roy's Id.

Wikipedia

https://en.wikipedia.org/wiki/Roy's_identity

UCSB

<http://www.econ.ucsb.edu/~tedb/Courses/GraduateTheoryUCSB/indirectutility.pdf>

U of Alabama

http://bama.ua.edu/~mjvanessen/Econ508_Demand.pdf

UVIC

http://web.uvic.ca/~egugl/indexecon400_files/lecture3.pdf

Weebly.com

http://rajkumar2850.weebly.com/uploads/1/4/9/8/14980396/roy_identity.pdf

12. IUF vs. EF

U of Vienna

http://homepage.univie.ac.at/ana-begona.ania-martinez/micro/micro_ihs3.pdf

York University

http://dept.econ.yorku.ca/~sam/4000/eg_dual.pdf

MIT

http://ocw.mit.edu/courses/economics/14-03-microeconomic-theory-and-public-policy-fall-2010/lecture-notes/MIT14_03F10_lec05.pdf

Princeton

<http://www.princeton.edu/~dixitak/Teaching/MicroHighCalculus/Notes&Slides/Lec04.pdf>

U of Basel

https://wwz.unibas.ch/fileadmin/wwz/redaktion/witheo/personen/georg/HS13/amic_3_13_beam.pdf

Shufe.edu.cn

http://se.shufe.edu.cn/upload/info//36396_1005260302415.pdf

13. EF

MIT

http://ocw.mit.edu/courses/economics/14-03-microeconomic-theory-and-public-policy-fall-2010/lecture-notes/MIT14_03F10_lec05.pdf

UCLA

http://www.econ.ucla.edu/sboard/teaching/econ11_09/econ11_09_lecture4.pdf

U of Alabama

http://bama.ua.edu/~mjvanessen/Econ508_Hicks_Demand.pdf

U of Colorado

<http://www.colorado.edu/economics/morey/6808/hicksian.pdf>

U of Basel

https://wwz.unibas.ch/fileadmin/wwz/redaktion/witheo/personen/georg/HS13/amic_3_13_beam.pdf

14. EAF

Wikipedia

https://en.wikipedia.org/wiki/Expenditure_minimization_problem

Berkeley

http://eml.berkeley.edu/~webfac/dellavigna/e101a_f03/lecture09.pdf

U of Minnesota

<http://faculty.apec.umn.edu/thurley/documents/ECON800102/Lecture/FALL2009/ExpenditureMinimization.pdf>

Willman.com

<http://willmann.com/~gerald/mikro1-01/lecnotes2.pdf>

15. DF

Princeton

[http://www.princeton.edu/~deaton/downloads/The%20Distance Function and Consumer Behaviour.pdf](http://www.princeton.edu/~deaton/downloads/The%20Distance%20Function%20and%20Consumer%20Behaviour.pdf)

U of Auckland

<http://docs.business.auckland.ac.nz/Doc/29-Alan-Rogers.pdf>

Wisconsin

<http://www.aae.wisc.edu/aae741/Ref/Chambers%20et%20al%20JET%201996.pdf>

Canadian Economics Association

<http://economics.ca/2002/pdf/0098.pdf>

Core.ac.uk

<http://core.ac.uk/download/pdf/6269513.pdf>

U of Auckland

http://yoda.eco.auckland.ac.nz/nzesg/PDFs/paper/Kathy_demand_2.pdf

U of Naples Federico II

<http://wpage.unina.it/cafierno/books/ch30.pdf>

16. DUF to DF

Princeton

[http://www.princeton.edu/~deaton/downloads/The%20Distance Function and Consumer Behaviour.pdf](http://www.princeton.edu/~deaton/downloads/The%20Distance%20Function%20and%20Consumer%20Behaviour.pdf)

Wisconsin

<http://www.aae.wisc.edu/aae741/Ref/Chambers%20et%20al%20JET%201996.pdf>

U of Auckland

<http://docs.business.auckland.ac.nz/Doc/29-Alan-Rogers.pdf>

Canadian Economics Association

<http://economics.ca/2002/pdf/0098.pdf>

Core.ac.uk

<http://core.ac.uk/download/pdf/6269513.pdf>

U of Auckland

http://yoda.eco.auckland.ac.nz/nzesg/PDFs/paper/Kathy_demand_2.pdf

U of Naples Federico II

<http://wpage.unina.it/caferio/books/ch30.pdf>

17. Expenditure Minimization Problem

Wikipedia

https://en.wikipedia.org/wiki/Expenditure_minimization_problem

Berkeley

http://eml.berkeley.edu/~webfac/dellavigna/e101a_f03/lecture09.pdf

U of Minnesota

<http://faculty.apec.umn.edu/thurley/documents/ECON800102/Lecture/FALL2009/ExpenditureMinimization.pdf>

Willman.com

<http://willmann.com/~gerald/mikro1-01/lecnotes2.pdf>

Chennai Mathematical Institute

<http://www.cmi.ac.in/~shreyas/ECO/Lecture03.pdf>

Tripod.com

http://foroughfarrokhzad.tripod.com/sitebuildercontent/sitebuilderfiles/econ3302_notes_3.pdf

Aniket.co.uk

http://www.aniket.co.uk/teaching/notes/Shephards_Lemma.pdf

18. HDF

Wikipedia

https://en.wikipedia.org/wiki/Hicksian_demand_function

MIT

http://ocw.mit.edu/courses/economics/14-03-microeconomic-theory-and-public-policy-fall-2010/lecture-notes/MIT14_03F10_lec06.pdf

U of Alabama

http://bama.ua.edu/~mjvanessen/Econ508_Hicks_Demand.pdf

U of Tennessee

<http://web.utk.edu/~rrobert3/505notes/Chapter5.pdf>

Metro State U

<http://faculty.metrostate.edu/BELLASAL/352/Lec05.pdf>

Pittsburg

http://www.pitt.edu/~luca/ECON2100/lecture_07.pdf

UCL

U of Colorado

<http://www.colorado.edu/economics/morey/6808/hicksian.pdf>

19. Antonelli Equation

U of Naples Federico II

<http://wpage.unina.it/caferio/books/ch30.pdf>

U of Auckland

<http://docs.business.auckland.ac.nz/Doc/29-Alan-Rogers.pdf>

Western Kentucky U

<http://people.wku.edu/youn.kim/separability-AJAE.pdf>

Princeton

http://www.princeton.edu/~deaton/downloads/Demand_Analysis.pdf

20. AIDF

U of Naples Federico II

<http://wpage.unina.it/caferio/books/ch30.pdf>

U of Auckland

<http://docs.business.auckland.ac.nz/Doc/29-Alan-Rogers.pdf>

Western Kentucky U

<http://people.wku.edu/youn.kim/separability-AJAE.pdf>

Princeton

http://www.princeton.edu/~deaton/downloads/Demand_Analysis.pdf

21. AIDF to HDF

----- Not available yet!

22. HDF to EAF

----- Not available yet!

23. HDF to EF

UCLA

http://www.econ.ucla.edu/sboard/teaching/econ11_09/econ11_09_lecture4.pdf

Texas A&M U

http://econweb.tamu.edu/tgronberg/ECON607_Fall2012/Lecture%20Notes_5.pdf

U of Colorado

<http://www.colorado.edu/economics/morey/6808/hicksian.pdf>

U of Massachusetts

<http://people.umass.edu/resec712/pdfs/Lecture%202%20Consumer%20Theory.pdf>

U of Alabama

http://bama.ua.edu/~mjvanessen/Econ508_Hicks_Demand.pdf

U of Basel

https://wwz.unibas.ch/fileadmin/wwz/redaktion/witheo/personen/georg/HS13/amic_3_13_beam.pdf

24. Shephard's Lemma

Wikipedia

https://en.wikipedia.org/wiki/Shephard's_lemma

York University

<http://dept.econ.yorku.ca/~sam/5010/consumer/s07.pdf>

U of Colorado

<http://www.colorado.edu/economics/morey/6808/hicksian.pdf>

U of Pittsburg

http://www.pitt.edu/~luca/ECON2100/lecture_07.pdf

Aniket.co.uk

http://www.aniket.co.uk/teaching/notes/Shephards_Lemma.pdf

25. MDF vs. HDF (Counterparts)

MIT

http://ocw.mit.edu/courses/economics/14-03-microeconomic-theory-and-public-policy-fall-2010/lecture-notes/MIT14_03F10_lec06.pdf

BCIT

http://faculty.bcitbusiness.org/kevinw/5701/hicks_marshall_explained.pdf

UCL

https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=17&ved=0CEkQFjAGOApqFOoTCN6JqJrDzccCFcShgAod96sF5Q&url=http%3A%2F%2Fwww.homepages.ucl.ac.uk%2F~uctpamv%2Fteaching%2FME%2Fme_4.ppt&ei=dT7hVZ77FMTDggT315aoDg&usg=AFQjCNGPcsIZ7RQsNlbRbWfVoHidgDiOg&sig2=N4mNUpYD6LCLiHiDYVvFCA&cad=rja

Policonomics.com

<http://www.policonomics.com/marshallian-hicksian-demand-curves/>

U of Vienna

http://homepage.univie.ac.at/ana-begona.ania-martinez/micro/micro_ihs3.pdf

26. Slutsky

Wikipedia

https://en.wikipedia.org/wiki/Slutsky_equation

Stanford

<https://web.stanford.edu/~jdlevin/Econ%20202/Consumer%20Theory.pdf>

Leipzig University

http://www.wifa.uni-leipzig.de/fileadmin/user_upload/itvwl-vwl/MIKRO/Lehre/AdvancedMicro/cs.pdf

Policonomics.com

<http://www.policonomics.com/slutskys-equation/>

U of Tennessee

<http://web.utk.edu/~rrobert3/505notes/Chapter5.pdf>

Pittsburg

http://www.pitt.edu/~luca/ECON2100/lecture_07.pdf

Texas A&M U

http://econweb.tamu.edu/tgronberg/ECON607_Fall2012/Lecture%20Notes_6.pdf