

(FRQRPLFV
2IILFH 5RRP

3URIHVVRU 'RQDOO
ZDOGPDQ#FRORU

&RXUVH ,QIRUPDWLRQ

:HOFRPH WR (FRQ 7KLV LV DGILW/DWELR/XULFN LQLSUKRDE
LQWURGXFWRQ WR HFRQRPHWULWRSLSFS/OQFHDVRLQRCPLFZVC

3UHUHTXLVLWHV

7KH PRVW LPSRUWDQW ELDFWRU WRKLOV FWRUWK LQNDIE EOWUD
DGGLWLRQ VWXGHQWV ZLOO ILQHGUMW HDGILQJ RILD OVKHEU
OHYHO RI KLJK VFKRRO \$OJHEUDXQ,XVGSDBUHQWPLDDOOHQGU
WKLW FRXUVH EXW WKH\ ZLOO EHXULHQG W&DIOFRXOUKWHZLOO

7KH FRXUVH SUHUHTXLVLWHV DUH RI WKH IROORZLQJ
(& 21 DQG
0\$7+
0\$7+
0\$7+
0\$7+ DQG
\$330

,I \RX KDYH QRW WDNHQ RQH RI WKHVHZLOVKRWHW D\ZDLFDH

,Q WKH ILUVW ZHHN RI FODVV

‡ 3OHDVH UH DG &DQLJOLD WKH FRXUVH WH[WERRN &K
‡ ,I \RX DUH QRW DOUHDG\ FRPIRLWREOMH ZLWK8QLFYUFW
D VLWH OLFHQVH WR WKH 06 211LHHSDFWDLVH RVRHQXLQ
LQ :LQGRZV 3&V DQG VRPH ODFV DQGLWQLWKHYBODEO
FRPSXWHU ODEV ,I \RX ZDQW KHFRSPS&WMDOORQRLW R
EXJEXVWHUV RU VHH

<http://www.colorado.edu/oit/services/messaging-collaboration/microsoft-office-365/help/proplus>

&RXUVH 2EMHFWLYHV

‡ 6WDWLWVWLFV LV WKH VWXG\ RVLFDWDRUWRXFDWQZR
WKDW LV VEMHFW WR UDQGRPQHVM LVKWRPDMQYHRMKNHF
ODQJXDJH PDWKHPDWLFDO V\PERVDFWRRV DQG WHFK

‡ 6WDWLWVWLFV LV WKH EXLOGLQH DSSOLFWRUHQRI
VWDWLWVWLFV WR HFRQRPLF PRGHGXLGGLGDWRD SURYHGR
LQWURGXFWRQ WR HFRQRPHWULFV

‡ 6LQFH WKH DSSOLHG HFRQRPLKWFRXUVHGDLDWDWDSUKR
WKH DELOLW\ WR RUJDQLJH DQG EOHVWLJDWH GDWD XV

/HFWXUHV 5HFLWDWLRQ :RUN /RDG

7KHUH ZLOO EH WZR OHFWXUHV ZHHNORP PHHWLRQJ 7XHVVG
S P LQ %(6& %HQVRQ (DUWK 6FLHQFHV URRP

,Q OHFWXUH , ZLOO FRYHU PRVWVEXXWVWRHWHQV ERRWKEX
DGGLWLRQ VRPH WRSLFV WKDWHDW R QRDUUWHDDWHIGV WKH
UHDGLQJ WKH WH[W EXW LW LV XERWHGM DLW D WODHS SORH VZ
HFRQRPLFV PFK EHWWHU E\ DWZHOGLQJOSHFVXUHQD V,Q
E\ EHLQJ SDUW RI WKWLRQV SXDNDLQJRTXWUQJ ER ZRUNL
LQ OHFWXUH H[HUFLVHV DQG LQ RWKHU ZD\

,Q DGGLWLRQ WR WKH OHFWXUH WRN VRORZGLQH UHFLWD

1XPEHU	'D\	7LPH	5RRP
7		2	+801
7		2	+106
7+		2	+801
7+		2	+801

,Q UHFLWDWLRQ PDWHULDO ZLOVEDHQSUSVREOHFH UHWHY
DGGLWLRQ ([FHO SURJUDPPLQJ DOWWRHLW ZLOO QEMHG U
RI WKH FRXUVH 7KHUH DUH PRUHLWWRQRQ VWXGHQWV
WR OHDUQ RQH RQ RQH 6LQFH KRZ ERORUHH FRLPYSDURXU
XVXDO WKUHH FUHGLW FRXUVH UHFLWDWLRQ DWWHQGDC

7R SDVV WKLW FRXUVH \RX PXVW DWWHQG DW OHDVV

,Q P\ H[SHULHQFH IRU D VWXGHQW ZLOO DYHUDJH P
DGGLWLRQDO *Realtime* WR WZR KRXUV QGZRONERXW TXLU
DVVLJQPHQWV LQ RUGHU WR IXOOLXQSRXUVWHQW DWKWHV FZL
IDLUO\ EDVLF FRQFHSWV EXW GRRQFHOSWXDWLDVBLVOHD
PDWKHPDWLFDO ULJRU LQFUHDVH DV WKH VPHVWHU SUR

&RXUVH 2XWOLQH

7KH FRXUVH *Probability* ZLWK *statistics* FRQLQXHV ZLWK
econometrics DOO WHUPV WR EH GHILQH

7KH IROORZLQJ LV D OLVW RI VHWKURHQV ZHONVFRYHFLWHGLU
EH XVHIXO WR \RXUWRLQHMKZKWHKZDLDLVWDXKDWVH FV FRX
SUHYLRXVO\ EXW , H[SHFW LW ZLROKDWYKQVSRQGWPHDC

Section 1

- ‡ 5HVHDFK LQ ³+DUG´ DQG ³6RIW VFLHQFHV
- ‡ 6XPPDWLRQ QRWDWLRQ
- ‡ ,QWURGXFWRQ WR SUREDELOLW\ \$[LRPV 9HQQ GLD.
- ‡ \$GGLWLRQ DQG FRPSOHPHQW UXOHV RI SUREDELOLW\
- ‡ &RQGLWLRQDO SUREDELOLW\
- ‡ 7UHH GLDJUDPV
- ‡ ,QGHSHQQGHQFH DQG PXWXDO H[FOXVLYLW\
- ‡ %D\HV ODZ
- ‡ 8UQ SUREOHPV
- ‡ %D\HV /DZ IRU SDUWLWLRQV

Section 2

- ‡ 5DQGRP YDULDEOHV DQG SUREDELOLW\ GLVWULEXWLRQ

‡ 'LVFUHWH UDQGRP YDULDEOHV WKH SUREDELOLW\ PD
‡ %HUQRXOOL ELQRPLDO DQG 3RLVVRQ UDQGRP YDULD
‡ 0DWKHPDWLFDQ H[SHFWDWLRQ
‡ ([SHFWDWLRQ RI D IXQFWLRQ RI UDQGRP YDULDEOHV
‡ &RQWLQXXV UDQGRP YDULDEOHV WKH SUREDELOLW\
‡ 7KH SRZHU H[SRQHQLDO DQG VWDQGDUG QRUPDO G
‡ %LYDULDWH PDUJLQDO DQG FRQGLWLRQDO GLVWULE
‡ &RQGLWLRQDO H[SHFWDWLRQ DQG YDULDQFH
‡ &RYDULDQFH DQG FRUHHODWLRQ

Section 3

‡ 7KH JHQHUDO QRUPDO GLVWULEXWLRQ
‡)URP SUREDELOLW\ WR VWDWLWLFV SRSXODWLRQ D
‡ 6DPSOLQJ WKHRU\ WKH GLVWULEXWLRQ RI WKH VDPS
‡ 7KH &HQWUDO /LPLW 7KRUHP
‡ 7KH FKL VTXDUHG GLVWULEXWLRQ
‡ 3RLQW HVWLPDWLRQ
‡ 8QELDVHGQHVV DV D SURSHUW\ RI DQ HVWLPDWRU

6LQFH WKHUH LV QR GLVN RU NHV RFR DXW O B FZL W KS W KO V VE
VLQFH WKHUH LV RQO\ RQH HGLW DRQ ZDQR SXVHGKFRS H LW
EHHQ XVHG IRU W W B O R X P H O X D W H B Z H T O D V W W H Y M E D V \$

7KH\ ZLOO EH FRPSRVHG RI TXHVWLRQV HIJ RPI WKK HDW HZ[HO
DGGLWLRQDO TXHVWLRQV

‡ 7KH ILQDO H[DP LV FXPXODWLYH WRV E H JL\$HPQ RQ 7XH
\$GGLWLRQDO QRWHV RQ WKH SUREOHP VHVV

‡ <RX PXVW DQVZHU DOO H[HUFLVHV EXW QRW DOO ZLOO
‡ 2Q VRPH SUREOHP VHVV WKHUHU ZLOO DEEHIHQ (7WHU
DUH WUXO\ H[WUD FUHGLW WKH FODDQ RQV\ WKH VHQGRU W
ZLOO FDOFXODWH JUDGHV IRU HYMUD VWXGHQWS ZRWHRRW
, ZLOO UHWXUQ WR P\ DVVHVVPHQM V SXHGHQWKH ZWRDQBY
DQG DW OHDVW VRPHWLPHV VXFFHVMXODFDWOLHP SWRG O

3SUREOHP VHVV DQG TXL] GHGOLQHVSRODGLQJ FHOO SKR

‡ /LNH PDQ\ FRXUVHV EXW XQOLNH FRXUVHSHW KL VWRSH
FRXUVH LV VHTXHQLDO LQ QDWLCHO LKOW EM XQXQWBO
XQOHVV 7XHVGD\ V PDWHULDO KDVEHQHUPDWVGHGJ PDKV
HDVLHU DQVZHUV WR TXL]]HV DQESUREOHV O/HMWB UOWK
GDWH DQG WLPH 7KLV PHDQV VWU]]FW GGGSOLRCHM PRVH

‡ 7KH ORZHVW SUREOHP VHVV VFRHJDRSSWGH OIRZHOV
WKLVSROLF\ WKH IDFW WKDW VROXWU RQKHZD OOL EGP SRW
DQG WKH LPSRUWDQFH RI NHHSLQQRSRQ HSWHREDMF ULHM
TXL]]HV ZLOO EH DFFHSWHG

6XFFHVVIXO VWXGHQV HLQH QKILUD ODXUR\ODRZLJG WHQLW UH
‡ UHYLHZ \RXU QRWHV VRPHWLPH DIXUVODHFWXUJH EXW
‡ ZRUN ILUVW RQJDKS KREORR DWHWDXUKXUVGDV WVSHP
DSSOLHV WR VWXGHQWV ZLWK 7KXUVGD\ DIWHUQRRQ U
WDNH WKH RQOLQH WLPHG TXL] E\ 7XHGD\ V OHFWXUH
ILQLVK WKH SUREOHP VHVV E\ 7KXUVGD\ V OHFWXUH

1RWH \RX PD\ ZRUN WRJHWKHU RQ+SRREOHP HDPKVVW XIQH
PXVW KDQG LQ WKH ZULWWHQ SUREOHP VHVV VROXWLRQV

‡ &HOO SKRQH ODSWRS SROLF\
BB

Notice for students with disabilities

,I \RX TXDOLI\ IRU DFFRPPRGDWLRQV VXEHPDWVWRP B LOHD
IURP 'LVDELQW\ 6HUFLFHV LQ D WLOHEH DGGQHVVWV WKE
'LVDELQW\ 6HUFLFHV GHWHUPLQHVHDFGRFEGOMWLRQW E
&RQWDFW :LOODUG DQGLVZV HRYOLFHDGR ('8

