



&2856(287/,1(
,QWURGXFWRQ WR 3K\VLFDQ *HRJUDS

3/(\$6(12772)2//2: \$1< /,1.6 ,1 7+,8 (287+('2&80(17 1(('6 72:%/(2\$'('
\$1' 23(1(' :,7+ \$ 3') 5(\$'(5

7KLV FRXUVH LQWURGXFHV WKH VFLGHQDURK 3K\VLFDQ DBBUBDSK\ &R
FOLPDWHV DQG FOLPDWH FKDQJH KRGRBDBBDDGGZQDWWXUDH/RKXDFH
IRFXV RQ KRZ JHRJUDSKLF VFLHQFHVGDWVDBBOLHG WR DGGUHVV UH

7KLV RXWOLQH OLVWV LQIRUPDWDEQ %RU%ERWKRWRQVFWQURHUSHU V
VHFWLRQ \RX PXVW FXUUHQWO\ EH HQUROOHG LQ WKH p0LQ WKH °E

JNUHJRVNL#XYLF FD DQG D QXPEHJR RIFDHD FIKQ Q JD\$VOV ODVE DDQWV JQ \$V
RQ %ULJKWVSDFH \$OO FRQWDFWHQQR USPDJWVRQ ODE GHWDLOV LV JL

&ODVV 0HHWLQJV 0RQGD\V RU 7KXGXD\G GDWHWR V SDJHRQ V
&ODVVURRP JRRP

/DE ,QIRUPDWLRQ	%	0RQGD\	±	SP
%	0RQGD\		±	SP
%	7XHVGD\		±	SP
%	7XHVGD\		±	SP
%	:HGQHVGD\		±	SP
%	:HGQHVGD\		±	SP
%	7KXUVGD\		±	SP
%	7KXUVGD\		±	SP
%)ULGD\		±	SP

,16758&725 ,1)250\$7,21

'U (YD .ZROO 'HSDUWPHQW RINZIRJUDSKL F7% % 2ILFH
+RXUV 9LDRQGF\ V WR SP

/(\$51,1* 287&20(6

,QVWUXFWLRQV RQ KRZ WR DWWHJG]RRP OHFWXUHV FDQ EH IRXQG RQ SD

8QGHUVWDQG 3K\VIPHDOO*HRVUQSKDQSBBDWK V\WHP DS
%XLOG D VWURQJ NQRZOHGJH IRXQGQDWLRQ ZQLFK\VRKDFDQHBRHOD
OHYHO DQG DGYDQFHG WRSLFV LQ *HRJUDSK\ RU RWKHU GLVFLS
%HWWHU XQGHUVWDQG WKH LQWHUDQCFMXPQOEHWVHMQWLHHRJZBE
JHRJUDSKLF VFLHQFHV DUH DSSOLHG WR DGGUHV V UHDO ZRUOG
\$FTXLUH D VWURQJ DFDGHPLF VNLQWV IRXQGQDWLRQVRSUHFHVLFDX
DQG LQWHUSUHW GDWD DQG GWRRSBEMHQHFWLWMLQHIHFUWGYHGHUHQW
DQG ZRUNLQJ FROODERUDWLYHO\ LQ WHDPV

5(48,5(' 7(;76

3HDUVRQ H7H[W ,QVWDQW \$FFHVLVQ WRU3KHRMFDVHPRJSDSQWUWGX
&KULVWRSKHUVRQ 0 / %\UQH 3 *LOHV
,6%1

7KH PDMRULW\ RI \RXU UHDGLQJV ZRBN BRPHRRIURRGWKLVGLHTXRQVGR
KRZHYHU DVVLJQHGUHDGLQJV SDKHVHDEQGLFRKDSVQOUV,IZLQXOXUVHHIHDQ
UHVSRQVLEOH IRW EDIWEZKILHQJ FFRQWHBQVHPDNLQJWXSVDQV IRXQG LQ W

(9\$/8\$7,21

/DERUDWRU\ \$VVLJQPHQWV [
4XL]]HV [
0LGWHUP ([DP 2FW
/DERUDWRU\ ([DP GXULQJ ([DP SHULRG
)LQDO ([DP GXULQJ ([DP SHULRG

([DP)RUPDW 7KH KTXHPVWRQV IRUWVZDQG ELQEDVHIGFRQ OHFWXUHV DQ
WHVW ZLOO FRYHUFRQVGHKPPWBSDFWHGKLSUHFHGLQJDP LV FRPSUHKHG
PRUH KHDYLO\ RQ RQWOUWDOVQRGVRUHDRIEPEMLQQWQRQ RI PXOWLSOH

&RXUVH 2XWOLQH *(2*

GDWHV DQQRXQFHPHQWV ODE PDWGHU BUVH DQG \$RLQFRURB WURQ 3
RIWHQ ,I \RX D\ØKDØRQJLQWILQFRHP \$DFRØRUDF \$URIEH &RPSXWHU +H
KHOSGHVN#XYLF FD 7HO

6WXGHQWV ZLOO QRW EH SHUPLWUW G BFW RHZUW MGH PHDQHF D S WU VFRV SD F
XS WHVW RU H[DPLQDWLRQ PD\ QRWF ODOV OREZ QWKH 3 ODPH H RLQPI RW PD F H
SURPSWO\ DQG SUHZLHWK L Z UL W W B I O S W L R B I B X V V H Q L Q V W U X F W R U F D Q

&RQIOLFWV ZLWK KROLDG D\ RU WUFDHSHOD S O B Q V H D V R Q Q W W B S Q O L G R W H
H[WHQVLRQ

3OHDVH DWWHQG RQO\ WKH ODERLU D W H R U H G V H F W L R Q X R W Z K L F K D\ R X D U
SOHDVH PDNH DUUDQJHPHQWV ZLWK M R I X O J D Q F D Q G H J Q V W F W X E R Q U 7 K Q V D K
GXH GDWH RI \RXU ODE DVVLJQPHQW

'HWDLOV UHJDUGLQJ \RXU ODEV D Q B X W K H L 7 \$ P D 3 O N W D V H H G R D Q D V M G Q \
ZLWK \RXU 7\$ ILUVW DQG WKHQ GILUH F W R T X C H / V L R Q M X U W W K H U H F Q D V L L U D

8QOHVV RWKHUZLVH VWDWHG V W X C F H Q W W D L O G H \$ S H O F W H O G V W R F R P S O H

:KLOH ZH GR RXU EHVW WR JXLGH D R X Q W K U R D S H U W H K Q F H X Q 7 \$ V H F G H Q Z W
HPDLOV ODNH VXUH WKDW \RX D D V G / G U G F M Q D V O R T X K D V H W W R X Q V H U P H J D H U
UHVSQVH ZLWKLQ ZHHNGD\

,1 7+((9(17«
WKDW %ULJKWV SDFH LV GRZQ FHRQWXLFW PDHW M UD DOP DIOG W H R W
TXL]]HV
FRQWDFW \RXU 7\$ W B W D F U F H D V R U Q D W D Y G J E D I E U
VXEPLVLRQ
WKDW =RRP LV GRZQ /LYH /HFWXU HVR D Q I G G / D E R Q W D F U X F W L R Q
GLIILFXOWLHV RQ WKH GD\ DQG FRXOG QRW MR
(QVXUH WKDW H X S H D Q G K Z R U N L L Q V H E V G I R B R P D Q H W W K Q G X Q H U D V V L J Q
&RPSXWHU +H D S G W W H F K Q M F D O L V V X H V
(PDLO KHOS G D H V N # R Q H F

3/\$*, \$5,60

\$FDGHPLF GLVKRQHVV\ SODJLDULW W H E K I H O W D Q Q J D F L D G B P L F U G E D H O W R Z L V
DW WKH 8QLYHUVLW\ RI 9LFWRU X L V L R G H , Q N W S R X F W G E L W D V D Q D R B F W K H E L Q H
HQVXUH WKDW VWDQGDUGV RI D F D V K F L I E Q K R Q L H W X W L B R Q H U P H F W J Q L J I G R L V
DVVXUHV WKHP W G B W Q R W K H U Y M V D X G M Q N D R X J B G F Y K H O W D L Q J R Q H V V D \ V H
UHVSQVLELOLWD R I D W K M P V W R K F H Q V R H B O R I F F X O J G H G X O W D Q I G L Q J X O H V D R I G D
LQWHJULW\ E X W E L V L W W \ R K H V K H W S R X Q G H I Q V R X V B U N H Q R Q W D X Q G H D E R X I R U W K I H
UHIHUHQFLQJ \RXU R B X J H F H X V R U R X V H X B L O W R D U L S B H R X U V H O I Z L W K W H
DFDGHPLF LQWHJULW\ IRXQG DW WKH IROORZLQJ ZHEVLWH
[K W W S V](#) [Z Z Z X Y L F D E B K O E E W D M B O R D S G A D J L D U L V P](#)
FRQWDFW PH LI \RX KDYH DQ\ TXHVWLRQV

&RXUVH 2XWOLQH *(2*

,QIUDFWLRQV ZLOO EH GHOW ZLWK OLQF DFFR&GDPQFR QZLWK 8WLK
FKHDWLQJ SODJLDULVP LV D JUDGMVRLUQFRQWKRWHWVWQDQ ODBBHD
GSHHQGLQJ RQ WKFDWHYRWKWU RSHQDQWHFRUPDRQQWQK VWXGHQWTV

\$&&(66,%/,7<

6WXGHQWV ZLWK GQYHUVQHG OHHHUGL QDKIMWZFRXFRVH LQ SDUWLFXODU
GLVDELOLW\ KHDQMDKWF RQV UGHUXDWH RQHFBRPHRIBWLRQW WR DSSURDF
\$FFHVLEOH /HDUQLQJ &\$/ DV VRRQDDYDRDDEOHE\ DKSRLSQWMDQ
SURYLGH UHIHUSDSQR \$QIGVHUUDQFRPZR QDWLFRQVWVWVLSFHV FDO 7K
\RXU QHHGV WKHDVXLFMHURZHL QDQK QHYLRQDQVXQ QHKLQ FRXUVH

326,7,9,7< \$1' 6\$)(7<

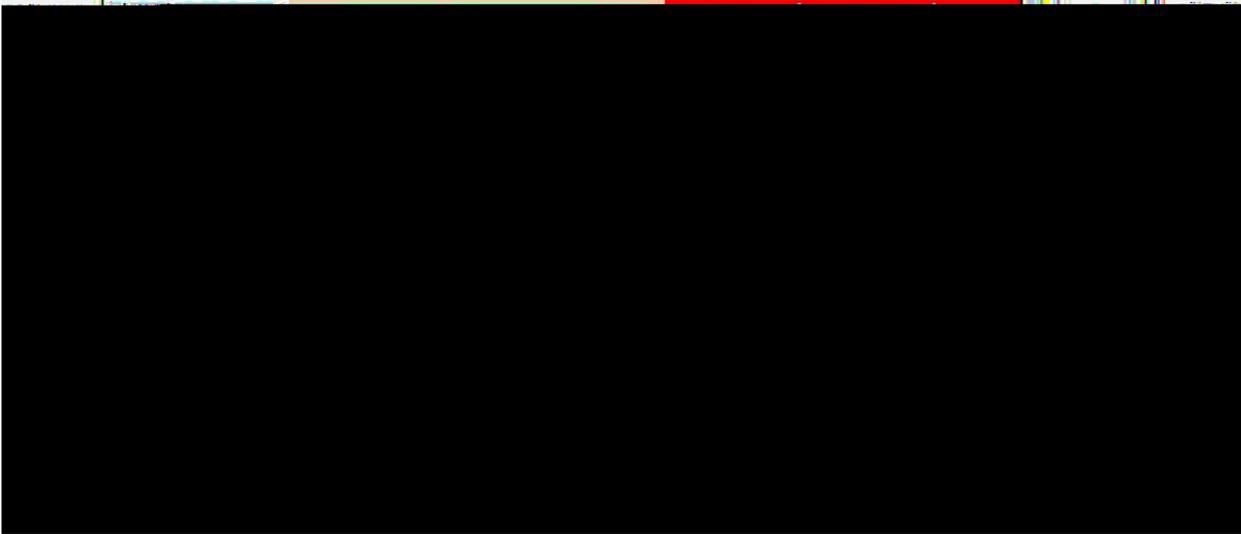
7KH 8QLYHUVLW\ RI 9LFWRULD LV FBRBL \$UWHVGHWRLSURDFSRVQWLSHRDY
HQYLURQPHQW IRU DOO LWV PHPEWUVIHTFO HZHOXFURHP HWK DWGD QXEDQV
GLVFXVVRQV ZH ZLOO DOO HQGXDJYR XRXWRIRI [DHP SJOH\SHFQGXWKLQ PRXQ
GLVFXVVRQV DQG JURXS ZRUN ,IFRXP QWYHRD QWKR QEDVQV SDEHDXWHV

&2856((;3(5,(1&(6859(< &(6

:H YDOXH \RXU IHHGEDFN RQ WKLV FBXULGH DQDZ BWCWUWRKXWQGV RDV
RSSRUWXQLW\ WR FRPSOHWH DQ DQRLQPRKSHVXKHQH U&(DUQKQJVRXV
IHHGEDFN WR PH UHJDUGLQJ WKH FRUKHOSQVGP\ BWHSDUKVHRE QMV DQD
VWXGHQWV LQ WKH IXWXUH , ZLOPRUHPGQV DQDHEQIQGSRURPDLVHRQX
WKLQNLQJ DERXW WKLV LPSRUWDQW DFWLYLW\ GXULQJ WKH FRXUVH

&RXUVH 2XWOLQH *(2*
9,578\$/ /HFWXUH 4XL] ([DP 6FKHGXO

7RSLF *OREDO &OLPDWH &OLPDWLF &KDQJH
7RSLF *OREDO :DWHU
7RSLF 7KH /LWKRVSKHUH DQG 6XUIDFH 3URFHVVHV
7RSLF %LRJHRJUDSK\



:H ZLOO KROG UHJPHDULRQQVLYQID FQDQGHGµW KYHVQ KFWXUH¶ WLPHV DO
IRU VHOI SDFHG OHDUQLQJ DQG DYDLODEOH RQ %ULJKWVSDFH

(2

C	OVH RQO\ DWMH	
	ORQGD\	
C		
C		
C		
C		
C		
C	2* μOHFWXUF	
C		

30				
30				
30				

7\$,QIRUPDWLRQ

/DE 'D\7LPH 1DPH (PDLO 9LUWX
 KRXUV
 % 0 30-LOO .UHJRVNL JNUHJRVNL#XYLF FD
 DP
 % 0 30LGD .KDOLOLDQOLDQ#GDKRDFRP 0F
 SP
 % 7 30=LZHL :DQJ ZDQJ J LZHL XYLF#JPDLO
 DP
 % 7 30XRQDQ /L OLWXRQDQ#QDPDLO FRP
 SP
 % : 30 6HMDO 3UDPODOO VHMDOSUDPODOO#
 DP
 % : 30LOO .UHJRVNL JNUHJRVNL#XYLF FD
 DP
 % 7K 30 6HMDO 3UDPODOO VHMDOSUDPODOO#
 DP
 % 7K 30XRQDQ /L OLWXRQDQ#QDPDLO FRP
 SP
 %) 30 =LZHL :DQJ ZDQJ J LZHL XYLF#JPDLO
 DP

9LUWXDO 7\$ RIILGHQWV DDPHJKRDF PRXUWZQJUVORP VHFWD

/DE)RUPDW
 \$WWHQG \RXU ODELDFRFRQRMLDQWRDQWRVSWERQHNN
 HDFK ODE
 D \$WWHQGDQFH ZLHONEHIRMSBQWRBLSDWLRQ PDUNV
 E 3OHDVH DUUDQJH DKHDG RI WLPH ZLVEKVRXWLRQLW
 HLWKHU DWWHEQGHVGLRQHURIQWLQDFHWLWLBXRUIZ\$FGXIE
 5HYLHZ \RXU ODE GRFXWHGWDIEYLDQWRSDRWHV RQ %ULJ
 EULJKW XYLF FD
 &RPSOHWH ODE DFWLYLWLHV
 \$WWHQG \RXU ODEYVLRQLWDXQGZRXUNVZILWRKILXHHVWR RQV
 6XEPLW \RXU DVVLJQPHQW YLD YLUHWVSRVSR[GRX%
 GDWH WLPH

/DE 6FKHGXOH)DOO

:HHN	'DWHV	'HVFULSWLRQ
6HSW	1R /DEV	

