

7 7

9

Revised  
S P%P%PP PP P Òå Ò!B pP



( + - ! + ' '\$ 2 ' " / + , " - 2

7 7 " ' . - " ( ' % , )

" , , " ( ' - - &

%1. " 8, =8; 8/ ->, \* =87 R - H H \$ 2 ->, \* =87\* 5 L \* - . ; < 1 2 ! ; 80 - - . < 2 7 . - / - 2 ; 2 7 , . - E / > 5 0  
. 6 9 5 B - . ->, \* =87\* 5\* 7- , 2 2 5 \* - . ; < H % . 9, 8 0 \* 6 2 - . < 2 7 . . 7 1 \* 7 , . = 1 . 8 9 6 . 7 = 8 /  
racticescholars\* 7- = 1. 2 . // , = 2. 7. << \* < 5 \* - . ; < + B G j ) using their knowl skills, and  
dispositions; 2) enhancing their ability to inspire others within their community to excel;  
and 3) engaging themselves and their institutions to increase the economic  
viability, and livability of = 1. 2 8; 0 \* 7 2 \* = 8 7 < \* 7- , 8 6 6 > 7 7

!

# PROGRAM OF STUDY

(. ' - " ( ' , ( + \* . " + & F - , & , - + ! ( . + ,  
"" d\ ] Ł \* - . ; < 12G . ; < 87\*5\*7- ! ; 8/ << 27\*5 . ; < 9 . , = 2 . < RS  
"" d\ ^ ° 87 = 6 98 ; \* ; Bf k < . < 2 # . 0 87\*5\$ = @ \* ; - < 12 RS  
"" d\ % \* 7 < 8 ; 6 \* = 2 . Ł \* - . ; < 12 RS  
"" d\ e # . 0 87\*5\$ = @ \* ; - < 12G ° 85 + 8 ; \* = 2 . ! ; 83 , = RS

, + ! : " , , + - - " ( ' \* . " < F E & ' - & , - + ! ( . + ,  
"" d\ ] \ 7 f 7 = 8 - > , = 27 - 8 ~ , = 27 # . < \* ; , 1 E ~ , \* - . 6 2 ( ; 2 2 0 E \* 7 - = 1 . " 2 < ; \* = 27 ! ; 8 . << RS  
"" d\ ] " > \* 5 \* = 2 . # . < \* ; , 1 RS  
"" d\ ] ^ & 7 - . ; < \* 7 - 2 0 \$ \* = 2 = 2 < RS  
"" d\ e " 2 < ; \* = 27 \$ 6 2 \* ; G - ? \* 7 , . - . - > , \* = 27 \* 5 # . < \* ; , 1 RS  
"" d\ e d " 2 < ; \* = 27 # . < \* ; , 1 R e Q ^ S

) " % " 3 - " ( ' \* . " + E & ' - & = , - + ! ( . + ,  
"" d\ ] ž ; 0 \* 7 2 \* = 27 < \* < \$ 8 , 2 5 \$ B < = 6 < RS  
"" d\ ] a ! . ; / 8 ; 6 \* 7 , . ~ 9 9 , \* 2 \* 5 6 ? \* 5 \* = 2 0 ! . 8 9 5 \* 7 - ! ; 8 0 \* 6 < RS  
"" d\ ] ^ Ł \* - 2 0 = 1 ; 8 > 0 1 % , 1 7 8 3 0 B R S  
"" d\ ] Ł \* - . ; < 1 2 2 \* 1 > 5 2 > 5 > ; \* 5 8 , 2 = B R S

( ' - > ' ( + , & ' - , 5 + - " " < E , 1 5 & & - , ? ! ( . + ,  
% a . , 8 0 7 \* = 2 - . < 2 7 . - = 8 9 ; 8 ? 2 . / 5 A 2 2 2 2 2 , 1 8 8 < 2 0 8 9 = 2 7 < = 1 ; 8 > 0 1 @ 1 2 1 \* - - 2 2 7 \* 5 \* ; . \* <  
8 / 2 = ; . < , \* 7 + . < = - 2 - H - - 2 2 7 \* 5 . ; = 2 2 \* = 2 7 \* ; . \* < E . ; = 2 2 \* = < E \* 7 - N 8 ; 9 8 < 6 \* < ; <  
, 8 > ; < @ 8 ; 4 / 8 6 \* ; ; 8 < = 1 . > 7 2 . ; < 2 3 6 \* B + . 2 , 5 - . - 2 = 1 2 \* ; . \* H 5 \* < , 8 7 < 5 @ 2 1 B 8 >  
\* - ? 2 8 ; \* + 8 > = < 0 0 < = - , 8 > ; < < \* 7 - \* ; . \* < 8 / < = B H

( ' - ) - " ( ' ,  
"" d\ ] ^ Ł 0 \* 5 \* 7 - . = 1 2 \* 5 f k < . < / 8 ; - > , \* = 2 7 \* 5 Ł \* - . ; < RS  
"" d\ ] % \* 7 < 8 ; 6 \* = 2 . ° > ; 2 > 5 6 " . < 2 7 RS  
"" d\ ] b d a " . < = ! ; \* , = 2 . < 2 ° 8 5 0 % \* , 1 2 0 R S

" ! + . - " ( ' ( ' - ) - " ( ' ,  
"" d\ ] \ / 2 = 8 ; B 8 / & \$ / 2 0 1 . ; - > , \* = 2 7 X ° > ; ; . 7 = f k < . < RS  
"" d\ ] & 7 - . ; < \* 7 - 2 0 = 1 . & \$ ° 8 5 0 \$ = - . 7 = RS  
"" d\ ] ^ ž ; 0 \* 7 2 \* = 2 7 \* 7 - ~ - 6 2 2 = \* = 2 7 8 // 2 0 1 . ; - > , \* = 2 7 RS  
"" d\ ] f 7 = ; 7 \* = 2 7 \* 5 / 2 0 1 . ; - > , \* = 2 7 RS  
"" d\ ] e " \$ 9 . , 2 5 / 8 9 2 < 2 " 8 , = 8 / - > , \* = 2 7 2 - H Ł \* - . ; < 1 2 0 R Q S

7 7 ( . + „ + " ) - " ( ' ,

R12 semester hoursS

L D E + , ! " ) & , ( ' % + ( , , " ( ' %

R21 semester hoursS

LED '-+( . -"(' -( -"('5 , +&! " +"-!"!5 " , , +- -"(' #G,?  
L \*;720\*<8,2=<@5+. 2=8->,.- =8=1. 9,8. <<8/-2<;=37\*, =37;. <\*;, 12,5-20=1.  
-.?. 596. 7=8/=1. 29,898<5=1\*=@5+, 86. =1. /8,><8/=1. 2;. <\*;, 1H \*;720\*<8,2=<  
@5-.?. 59\*, \*- . 62 @;220<45\*7- <452 ;;22>20=1. 2;. <\*;, 15; \*>;. \*<@. 5\* <  
<=>\* =02</8, -.?. 5920;. <\*;, 12. \*H

LEE %"- -"/ ; ; \*G!?  
L \*;720\*<8,2=<@5+. 2=8->,.- =8:>\*5\* =2. ;. <\*;, 1; 5=- =8=1. -.?. 596. 7=8/\*7  
\*, =37;. <\*;, 1-2<; =37 <-> B+892<@52, 5-. ;. <\*;, 19\*;\* -06</8; >\*5\* =2. -. <07F  
-.?. 5920<>?. BN>. <377\*2. F-.?. 5920: >. <37</8; \*7- \*7\*BC202=;?2@F\*7-  
2=;9. 20:>\*5\* =2. ;. <\*;, 1 <-> 24L \*;720\*<8,2=<@5\*7\*5C ;. \*-20<=1\* =/8,><87  
>\*5\* =2. ;. <\*;, 1-. <07H

LEF +, - ' "'- -" , -" , ; >G?  
L \*;720\*<8,2=<@5>7-. ;<=7- 18@ =8>< E\*99BE\*7- 2=;9. =0 <-E, 8;. 5=37\*7-  
;. 0. <<37E87. 0\*, =8, ~Žž' ~ E\*7- °125 >;. H \*;720\*<8,2=<@5\*58. A\*62. \*7- +. \*+5  
=82=;9. =6>50\*, =8, ~Žž' ~ E. 0. <<37\*7- ~ Žž' ~ H \*;720\*<8,2=<@5\*7\*5C  
;. \*-20<=1\* =/8,><872/;. 7=25<=2=2<\* <@. 5\* <=18< @121/8,><8762 - 6. =18<  
R>\*5\* =2. \*7- :>\*7=2\* =2. ;. <\*;, 1-. <073+12, 8;>< <9\*7<6>525 <6. <=;H

LHM, , +- -"(' &">G?  
L \*;720\*<8,2=<@5-.?. 59=1. 2\*, =37;. <\*;, 1-2<; =37 9,898<5+892<@52, 5-.  
2=0\* =378/;. <\*;, 16. =18-880E6. \*<>. 6. 7E\*7- <=2=2F;. <\*;, 1. =12F# =\*22CF  
=6. 6\*7\*06. 7F\*7- 7\*?2\* =20=1;8>01 =1. -2<; =379,8. <H

LML " , , ++ \* , À ,À'6' @Q"À P ð Ù %5 •%5 r 700 à ,!% 2À•6' LHMOPĐ `À!%

R12 Semester hoursS

LFE + '" 3 -" (' , , ( >"G% 2 , - & ,  
%12, 8>; < . A\*6 2. < , 87= 6 98; \*; B=1. 8; 2 <E9; \*; =2. <\*7- ;. < \*; , 1 2 95 772 0E6 \*7\*020\*7-  
\* << <20, 1\*70 2 8; 0\*72\* =27<\* << 8, 25B= 6 4H \*; =2>5; . 6 91\* <2@25+. 95, . - 87  
\* << <20=1. >=2B8/=1. 8; 2<+\* < - 87 9. ?2><\*7- . 6. ; 020; . < \*; , 1 \*7- - . ; 220  
2 95\* =27</8, 9; 8/ <<27\*59; \*; =2. H

LFI + (+ & ' ) + " , % 6 / % . -" ' > G) ?% ' + ( + & ,  
%12, 8>; < \* - - ; . << <=1. =1. 8; 2 <E9; 8/ <<27\*5\*99; 8\*, 1. <E\*7- >7- . ; <=7- 20</; 86 ?\* ; 2><  
9B, 18802\*59; ; <9. , =2. <\* <=1. B; . 5= =8- . ? . 5920E5\* - 20E\*7- 6 \*7\*0209. 895 \*7-  
9, 80\*6 4H, 6 91\* <2@25+. 87 +. <=9; \*; =2. </; 86 =1. . - > , \* =27\*5 <8, 25; 27, . <\*7-  
6 \*7\*Q 6. 7=9; 8/ <<27</8, <> <=220\*7 8; 0\*72\* =27K, \*9\* , 2B/8 , 87=2>8><0, 8@=1H

LGF "' -!+ (. ! !' (3/2 ( 2 >  
%12, 8>; < . A95. <=1. 8; 2 <E6 8. 5E; . < \*; , 1E9; \*; =2\*5\*995\* =27<E, >; . 7=2<> . <E\*7- , >; . 7=  
\*99; 8\*, 1. <=8. - > , \* =27\*5 =, 17880B5\* - . ; <12H B/8, >2087 =1. 2= 0\* =27 8/ =, 17880B  
2=8, >; ; 2>5-6 E9. - \*080E < 18858; 0\*72\* =27 6 \*7\*Q 6. 7=E\*7- < 18858; 0\*72\* =27  
5\* - . ; <12E=1. , 8>; < . A98< <5\* - . ; <=8 \* @2. ?\* ; 2 =B8/^ ] <=, . 7=>; B=, 17880B2<> . 4Pa.

LGD + ', (+ & -"/ .++" .% .& , " ' >G?  
 %12, 8>; < /8, >< 87\*720. 9=1 ⇔-B8/, >;. 7=1. 8B\*7- ;. < \*;; 1\*+8>=, >; 2>56 -. <07  
 \*7- 2<;. 5=87<12>8-. ?. 8920\*7- <⇔\*2209,8/. <<87\*55\*;720, 866>722<H  
 %1;8>01 \* 9,8. <<8/-2>><<87E;. /5, =87E;. \*-20E-2, 8?.; 8E-. <0720E\*7- <1\*;208/  
 . A9.; 27,. <E5\*;720\* <<8, 2= <@25. ?. 89\* 95=8, 6 8/+ . 2/<\*+8>=, >; 2>56 -. <07H%1. B  
 @25. ?. 89\*7\*>=1. 7=2, >; 2>56 /8, =1. 2@8, 495, . \*7- . 70\*Q 2=1. \*7\*8<28/-\*≠ 8  
 -. =; 62. 5\*;7207. . <\*7- 8>= 86. <8/=1. 2, 57=H%1. B@25. <07\* <+⇔\*7=2. E870820  
 9,8/. <<87\*5. ?. 896. 7=957 /8, =1. 2@8, 495, . H

LFF % ' -!" % ,,, , (+ . -" (' % +, >G?  
 %12, 8>; < 9,8?2. <\* , \* < ⇔-B\*99,8\*, 1-8>7-. ; ⇔\*7- , >;. 7=50\*5\*7- . =12\*52<. </8,  
 5\*-.; <2. ->, \*87\*5 7?2876. 7=H

JLI , - + -" , " ' (% %G? !"  
 %122\* < 62\*;Q\* < -E2=; \*, =2. , 5<</8, 7. @\*7- \* <92202⇔>, =8; <E\*->5. ->, \*8; <E\*7-  
 \*-37, =/\*, >5B-8\*-; . <<, 1\*570 <8/= 7. 7, 8>7=; . - +B, 850 = \*, 1.; <H . =20<⇔; = -  
 . //, =2. 82 =1. , 5<<, 886 E9, 2, 25 <8/, 8>; < -. <07\*7- 957720E⇔\* = 02 </8, 2, ;. \* <20  
 <0722\*7=5\*;720\*7- . 70\*Q 6. 7=@21, 850 ⇔-. 7=H

@

%1. 78; =1.; 7 fl. 7=>, 4B&72.; <2B" 8, 8,\*= 2. ->, \*87\*5. \*-. ; <122-. <07. - =8. 71\*7, .  
 =1. 5\*-.; <12. //, =2. 7. <<8/5\*;720\* <<8, 2= <. 6 98B - 2\* +; 8\*-; \*70 8/25 <E6\*7B8/  
 @186 @8, 42. 6 98B - 7 &8, + & + & +





+ ' ' ' , , ( " - ,

\*7-2\*=<\*-62=-8=1. -HH9,80\*6\*; . /;; -8\*<L5\*;720\*<<8,2=<M\*=1.; =1\*7=1.  
68. B92\*5<- . 7=M. <07\*37H/A. ;. \* <87/8; =122=1\*=1. &72.; <2B; ., 8072 <=1.  
<0722\*7=9\*, =2\*5 A9.; 27, . <=1\*=, \*7-2\*=<+; 20@21 =1. 6 2=8=1. 9,80\*6H\*, >5B\*7-  
, \*7-2\*=<@25@8,4=80 =1.; \* <\* <<8, 2=<2=1. 5\*; 720. 7=; 9,2 +B/8,6 20, 866 >722 <8/  
2: >2B-. <07. - 86. 5 =1. 8; B@21 9\*, =2. H/A. 8>= 86. @25+. 9\*, =287.; Q, 185;  
0\*->\*=<+. =; 2/8,6. - +B=1. \*992\*378/=1. 8; B\*7- ;. <\*; , 1\*7- /\*, >5B. 71\*7, . - +B  
, >;. 7=; . \*52 9\*, =2. H

(!(+ - ( %

%1. -HH9,80\*6 >=22 <\* , 818= 68. 5 2 @121 5\*; 720  
\*<<8, 2=<@259,80. <<=1; 8>01 =1. 9,80\*6 @21 \* , 866870,8>9  
8/ 9. ; <H ~ 4 B . 56. 7= 8/ =1. , 818= -. <07 2 \* L<B<= 6 <M  
8, 27\*=37 =1\*= 5?.; \*Q < 2-22>\*5 =57= 8 \*-; . << 5; 0;  
; . 087\*5. ->, \*37\*52<. <H ~ <9\*; =8/ =1. &72.; <2B<; . 087\*5  
<= @\*; - <12/8, >E\* <0722\*7=9\*; =8/ =1. , 8. \*7- <9, 252=37  
, 8;< @8,4 2, 8, 98, \*= <= \*6Q\* <- \* , =222 < 2 @121 5\*; 720  
\* <<8, 2=< @25+. 2?85. - 2 . A98, 20 ; . 087\*5. ->, \*37\*52<. <\*7- =1. 7E \* <\* = \*6E  
\* = 69-20-898<22. 52 9\*, =\*7 2 98; =\*7=, 87, . ; 7, 18< 7 +B=1. 5\*; 720\*<<8, 2=<H~>; =1.; E  
\* 4 B \* <<69-37 2 =12 \*99, 8\*, 1 2 =1\*= 68<8/ =1. 2 98; =\*7= . ->, \*37\*52<. <, \*778=+.  
; . <83. - =1; 8>01 2-22>\*5\*7- 285= - . //8; <>, 1 \* <\*; . , 86687 2 6 \*7B= \*- 287\*5-8, -8; \*5  
9,80\*6 <+>; \* =1.; 6 >=, 86. /, 86 = \*6 \*7- 2=; \*Q 7, B. //8; <=1\*=2, ;. \* < =1. . //2\*, B8/  
=1. 222=2. H

& " , , " ( ' ( % " 2

- $f_7 B_8 > ; 85^* <^* 5^* - . ; E @ 1^* = - 8 B_8 > 189. 2 B_8 > ; 2 9^* , = 2 B_8 > ; , 86 6 > 7 2 B^* 7 - N_8 ;$   
 $8, 0^* 7 2^* = 37$
-

+ (

! - ", - " ( ' , + ! 4

%1.; \*. 6\*7B-2/.; 7=-./1237<18; \*, =37; . < \*, 1H86. \*. 2,5-.- +. 5@H /; ;. \*-20  
=1. < \*7- 8=1.; <EB8> 6 ><=-. ?. 59B8>; -. /1237 0,8>7-.- 2 =18< , 2= +B9>+51. -  
;. < \*, 1.; <H> 8> 6\*B, 188< =8, 87<2.; -. /1237<8=1.; =1\*7 =18< 5= - 1.; H =

=1 ~ ! ! 1 < . .

2) ,  
=1 Ê r ° H ê 1.;

9. < 7= - 8 < 998; =\* << ; =27+P1. , B 52 \* <9. , <2, 5-. \* 957 8/\*, =27E\*, =27E8+< ;?\* =27E  
\*7- ;. /5, =27 87 =1. 8+< ;?. - . //, <RHS

& , 5 7 7 5 "% '\$" 0" 35 7 7 A . '\$' & 5 7 > FDDL?7  
" (, ' % , 5 6  
7

%1. \*, =27 ;. < \*, 1 R #S98; =27 8/! ~ # T9\*; =22\* =8, B\*, =27 ;. < \*, 1 U2-. /2. - \* < \* 6 > 52 =\* 0  
=B9. 8/ ;. < \*, 1 -. < 07. - =8 B25 9\*, =2\* 5. < 5<, \* 9\* + 5 8/ 2 9, 8? 20\* < 9. 22 \* < 9. , =8/  
9\*, =2. \* 7- 6 \* -. 9 > + 2 = 8. 7\* + 5 < ; > = 2 B\* 7- = < 20 P1 2 2 ; \* = 2. 9, 8. << 2 + 85 = ;. -  
=1; 8 > 01 = 1. < \* = 02 >< 8/ < \* 7- \* ; - ;. < \*, 1 6. = 18 < 0 > = # - 2/ ; < / 86 < 27 = 22 ;. < \*, 1  
9\*, =2. 4 = 1. ! ~ # ? 2 @ \* 99. , 2 = < < + 3, = 2. ;. /5, = 27 \* < \* / 8, 6 8/ - \* = E02 20 ;. - . 7. \* 7-  
; . < 9. , = 8 2 > 22. B- ; 2. 7 6 86. 7 < \* 7- . 9 2 1 \* 7 2 < RHS

, (' 5 7 A + . + 25 7 > , 7 ? > FDDL?7  
> F 7 ? 7 ! ( . , ' \$ , 5 6 7

~, =27 ;. < \*, 1 2 \* / \* 6 2 B 8 / 9 \*, = 2. < 8 / 5 2 2 0 2 : > 2 B = 1 \* = \* 2 < 2 \* 0. \* = ? \* ; 2 = B 8 / @ \* B < = 8 5 7 4  
9\*, = 2. \* 7- 2. \* < 2 = 1. < ; ? 2. 8 / 1 > 6 \* 7 / B > ; 2 1 2 0 ~ , = 27 ;. < \*, 1 - 8. < 7 8 = < \* ; = / 86 \*





v ž 7, . =1.

Ł \*; 720\* << 8, 2 = < @181\*?. 78=, 86 95 = - =1. - 2<< ; \* = 27 / 8>; B \*; < /; 86 =1. < 6. < =; 2  
@121 < N1. 9\* << - =1. , 86 9, . 1. 7 < 2. \* << << 6. 7 = 1\*?. = @889 = 27 < = 8. A = 7- =1. = 2. G  
ż

" , , + - - " ( ' ( & & " - - 6 ! ( % ++ ( & & . ' " - 2

%d. L \*-. ;G, 185; ° 86 6 >72BR\$ S, 87, . 9=@\* <- . ? . 589. - \* =1. ~ ; 287\* \$\* = &72. ; <2B  
R 587 X ° 5; 4E^\\eSH129,8. <<\* <<6. <=1\* =+8=1 /\*, >5B\*7- 5\*; 720\* <<8, 2= <\*; . . A9. ; <=  
\*7- <1\*; . 185. ; <2 =1. 5\*; 7209,8. <+P1. /\*, >5B\*; . . A9. ; <2 \*995- ; . < \*; , 1E@; 220\*7-  
< 185; 55; \* =>. \*7- =1. 5\*; 720\* <<8, 2= <\*; . . A9. ; < \*7

+ . - " ( ' )

¿ \*; 720 ~ <8, 2 = <6 > <6 \* 2 = 2 \* 6 2 2 > 6 \_ H \ O \* - . 982 = \* ?

=1. ,850 8// ;20=1. ,8>;< H&75<<8=1. ;@2 ;. : >2. - +B\*7\* ,\*- . 62 - . 9\* ;=6. 7=EB8> -8  
78=7. . - \*99,8? \*5-8- ;89\* ,8>;< 2B8> 222 = =1. - ;899,8 ; =8=1. 9>+521. - . - \* -57. =8  
- ;89H

(. + , " - ! + 0 % + ( % " 2  
~ \* = < /8 ; - ; 89920\* , 8>;< 8 ; \* - - 20\* , 8>;< \* ; . ? \* 2 + 5 = 85\* ; 720\* << 8 , 2 = < 87 =1.  
~ , \* - . 62 \* \* 57 - \* ; 98< = - 87 =1. Ž f l & @ . + < 2 1 = 90 N . 02 = \* ; H 4 > H - > N H % . - \* = < \* ; . 02 . 7 / 8 ;  
\* 5 = ; 6 < /8 . \* , 1 < 6 . < = ; H ! 5 \* < , 1 . , 4 = 1 2 < 2 / 8 ; =1. , 8 ; . , = 2 / 8 ; 6 \* = 37 H

" - ! + 0 " ' + ! ( & + ( + &  
f i E \* / = ; 6 2 = ; 6 E B 8 > @ 2 1 = 8 @ 2 1 - ; \* @ , 8 6 9 5 = 5 / ; 8 6 = 1 . 9 , 8 0 \* 6 E B 8 > 7 . . - 8 < + 6 2 \* 5 =  
@ 2 1 - ; \* @ \* 5 / 8 ; 6 < 0 7 . - + B = 1 . - . \* 7 8 / B 8 > ; , 8 5 0 H f 7 < < > , = 8 ; < @ 2 5 + . 7 8 = 2 2 - 8 / = 1 .  
@ 2 1 - ; \* @ \* 5 8 7 ; . ? 2 - , 5 << 5 < 8 ; / 2 \* 5 0 \* - . ; 8 < = ; < + B = 1 . Ž // 2 . 8 / = 1 . # . 0 2 = \* ; H % .  
2 < < > , = 8 ; 6 \* B 7 8 = 2 < > . \* W \* < = 1 . / 2 \* 5 0 \* - . / 8 ; B 8 > 2 B 8 > - 2 7 8 = / 5 8 ; 1 \* ? . 9 , 8 . << - \*  
- ; 8 9 N - - / 8 ; 6 @ 2 1 = 1 . Ž // 2 . 8 / = 1 . # . 0 2 = \* ; 9 , 8 ; = 8 = 1 . 7 2 = 1 @ . . 4 8 / , 5 << < 8 ; 1 . , 4 @ 2 1  
= 1 . Ž // 2 . 8 / = 1 . # . 0 2 = \* ; / 8 . A . 9 = 3 7 < = 8 = 1 2 9 8 5 B H ( . > 7 - . ; < 7 - = 1 \* = 5 \* ; 7 2 0 \* << 8 , 2 = <  
@ 2 5 A 9 . ; 2 7 . . \* ? \* ; 2 = B 8 / , 2 , > 6 < 7 , . < = 1 \* = @ 2 5 / 8 , . = 1 . 6 = 8 @ 2 1 - ; \* @ / 8 6 \* 5 8 > ; < < / 8 ;  
8 7 . < 6 . < = ; H / 8 @ ? . ; E @ 1 . 7 = 1 2 8 , > ; < 2 = @ 8 , 8 7 < , > 2 . < 6 . < = ; < E @ . @ 2 5 \* 7 = 8 . 7 < > .  
= 1 \* = B 8 > 1 \* ? . < \* 2 / \* , = 8 ; 2 5 - . \* 5 @ 2 1 = 1 . < , 2 , > 6 < 7 , . < + . / 8 . \* 5 3 @ 2 0 B 8 > = 8 . 7 ; 8 5 / 8 ; \*  
= 1 2 - < 6 . < = ; H ) 8 > @ 2 5 7 . . - 8 9 . = 2 3 7 = 1 . Ž // 2 . 8 / ; \* - > \* = ! ; 8 0 \* 6 < . A 9 5 2 2 0 2 @ ; 2 2 0  
@ 1 B B 8 > < 1 8 > 5 + . \* 5 3 @ . - 8 . 7 ; 8 5 H % . \* + 8 ? . ; 0 = 5 = 3 7 < \* 9 9 5 = 8 / 5 \* 7 - < 9 , 2 0 ] b @ . . 4  
< 6 . < = ; H % . - \* = < / 8 < > 6 6 . ; E . 2 1 = @ . . 4 / 5 \* 7 - < 9 , 2 0 = ; 6 < E \* 7 - @ 2 = ; = ; 6 \* - - < N ; 8 9 <  
- . 9 . 7 - > 9 8 7 = 1 . < << 3 7 2 @ 1 2 1 = 1 . , 8 >;< 2 = 4 7 H % . < 9 , 2 2 - \* = < \* ; . 0 2 . 7 2 = 1 .  
\$ > 6 6 . ; \$ 1 . - > 5 8 / ° 5 << < H % . 5 < = \* = < 8 \* - - 8 ; @ 2 1 - ; \* @ / 8 6 \* , 8 >;< @ 2 5 + . 9 , 2 1 = - 2  
= 1 . \$ 1 . - > 5 8 / ° 5 << < / 8 . \* , 1 < 6 . < = ; H

+ ' , + ( % " 2

~ 55\* ; 720\* << 8 , 2 = < @ 18 @ \* 7 = 8 = \* 7 < / . ; 0 \* - > \* = , ; . - 2 / ; 8 6 \* 7 8 = 1 . ; 2 < 2 = 3 7 = 8 Ž f l & 6 > < =  
/ 8 5 3 @ = 1 . 0 > 2 . 5 7 . < 5 = - + . 5 3 @ G

' + % . " % 8 / 2 2 5 = \* 7 < ; 2 = 6 > < = + . ; . . . 2 . - 9 , 8 ; = 8 , 8 7 < 2 . ; \* = 3 7 8 / = 1 . = \* 7 < / . ;  
; . : > . < H % . = \* 7 < ; 2 = 6 > < = , 5 \* ; 5 < 1 8 @ = 1 \* = = 1 . , 8 >;< @ 8 , 4 = 8 + . = \* 7 < / . ; . . - @ \* < = 4 7 / 8 ;  
0 \* - > \* = , ; . - 2 4 7 5 5 ; . - 2 < . \* ; 7 . - / ; 8 6 \* ; . 0 2 7 \* 5 3 , ; . - 2 - 2 < 2 = 3 7 6 \* B + . = \* 7 < / . ; . - H  
Ž 7 5 , 8 >;< < 2 @ 1 2 1 \* ' 8 , + . = ; @ \* < . \* ; 7 . - 6 \* B + . = \* 7 < / . ; . - H % . 0 \* - . < 2 = 1 . < , 8 >;< <  
@ 2 5 7 8 = + . / \* , = 8 . - 2 = 8 B 8 > ; Ž f l & ! ! ~ > 7 5 << = 1 . , 8 >;< < @ . ; . = 4 7 \* < 9 \* ; = 8 / = 1 . 1 ; . \* = ;  
° 2 , 2 1 \* = 2 8 7 < 8 ; = 2 6 8 / ° 8 5 0 < \* 7 - & 7 2 . ; < 2 2 < H

% % - + ' , + + " - , & . , - ! / ' + ' 0 " - ! " " L 2 + , ( - ! 0 + " "  
+ " 6 8 , > 6 . 7 = 3 7 8 / , 8 >;< 2 / 8 ; 6 \* = 3 7 6 > < = + . < + 6 2 = - @ 2 1 ; . : > . < = / 8 ; = \* 7 < / . ; H % 2  
- 8 , > 6 . 7 = 3 7 , \* 7 2 , 5 - . \* , 8 >;< < 5 5 > < < 8 , \* = 5 0 - . < ; 2 = 3 7 H Ž f l & 2 8 7 = 1 . < 6 . < = ;  
< 6 < = 6 H 8 >;< < = 4 7 2 \* - 2 / . ; . 7 = < 6 R > , 1 \* < : > \* ; = ; S @ 2 5 7 8 = + . = \* 7 < / . ; . - 1 8 >; / 8 ;  
1 8 >; H 7 . : > \* ; = ; 1 8 >; 2 . : > \* 5 = 8 H 8 / \* < 6 . < = ; 1 8 >; H





"I do hereby acknowledge the existence of the Northern Kentucky University Graduate Student Honor Code. I understand that the Graduate Student Honor Code supports an environment that values integrity, honesty, and ethical conduct for all Northern Kentucky University Students. I understand that by my enrollment at Northern Kentucky University, I confirm my agreement and understanding of the policies and procedures outlined in the Graduate Student Honor Code."

~>=1.; 2/8; 6\* = 87 87 =1. 0\*->\* = , 8. 8/ , 87-> , =, \*7 +. /8>7- \* = =1. ž //2. 8/1 ; \*->\* =  
! ; 80 \*6 <@. + <2= H1=90ND \* - < 188574>H- >N

. " - " ( ' )

+ ( + & ! ; 8726 \* 1201 : > \* 52E278? \* =2. E\*7- , 8<Q 7<22. ı - H H ı - , \* = 87\*5  
ı \* - . ; <12 /8 /> 5B. 6 95B - ; . 02725 ; /1. ; ı 3 =1. ! . \* : \* ı 8 > < 287ı 20

#



"/ + ( ( . + , \* . " + & ' - ,  
~ 9,80\*6 -2, ,8, 6\*B@\*2. \* 9,80\*6 ; . : >2. 6. 7=8752=1. 9,898< - @\*2. ; 2-78=2  
?25=278/\*7B9. ;=2. 7=>72. ; <2B;. 0>5=27E9,8. .->. 8; 982BH~, 8;>; < 6 21=+. @\*2. -  
>7-. ; =1. /85@20, 2, >6 <=7, . <G

Ø %1. 5\*;720\*<8, 2= 1\*<sup>\*</sup>5. \* -B6. =1. ;. : >2. - , 8;>; < 8+3, =2. <=1; 8>01 <86.  
. A9. ; 27, . @121 @\* <78=2 =1. /8, 6 8/\* =\*7<. ; \*+5 , 8;>; < H  
Ø %1. 9,80\*6 -2, ,8, - . = ; 6 2. <=1\* =1. 5\*;720\*<8, 2= @8>5 78=+. 7. /2/; 86  
=1. ;. : >2. 6. 7+H

~ 7\*99,89,2= , 8;>; < @\*2. ; /8, 6 6>=<+. <27. - +B\*7. -HH9,80\*6 -2, ,8, \*7- \* , 89B  
<>+6 2= - 8=1. 0\* ->= 8//2. Hf7 9,80\*6 ;. : >2. 6. 7=2@\*2. -E=1. 6 27>6 7>6+. ; 8//  
18;>; <. : >2. - /8, =1. 9,80\*6 2>7\*//. , = -Hf7 8=1. ; @8, - <E\*78=1. ; , 8;>; < 6>=<+.  
<>+<2>= - /8, =1. , 8;>; < =1\*=@\* <@\*2. -H

& ) . , , ( . + ,

" + +2 +/" ,  
\$. . 52; \*; B2B8>; 95, . /8, /2- 202/8, 6 \* =27E<=>- B20: >2 =5EQ =20\* +2= 8. \* E@8, 420  
870, 8>99, 83, =E6 \* 420\*7 \* 9982=6. 7=/8; . : < \*; , 1, 87<5\* =27E, 1, 420B8>; . 6 \* 25\*7-  
6>, 168. H%1. 52; \*; B, 87=2<+884E9. ; 2-2\*5E\*7- 08?. ; 76. 7=- 8, >6. 7<2\*-- 227=8  
9, 8?2 270\*, . . <<=8. 0-884E. 5, =872 3>; 7\*5E\*7- 7>6. ; 8></>50; A=; . <8>; . . <+8=1 87\*7- 8//  
, \*69>+H\$ ; ?2. <2, 5-. ; . < \*; , 1 \* <2=7, . R-B9187. E2 9. ; <87E+B. 6 \* 258, +B2<=7=  
6. <<\*020->; 20< 5, = - 18>; <E2= ; 52; \*; B5\*7E\*, . . <<=8=1. f7= ; 7. =\*7- . 6 \* 25\*7-  
. 5, =872 ; . < ; ? . 6 \* = ; 25H

~ \*, 22<2, 5-. , 869>= ; 5+<87=1. /2<=7- /8>; =1 /58; E@8, 4<=27<\*7- /88- 2=1. 8>= ;  
5+BE@8, 869>= ; 0: >29. - 0, 8>90=>- B; 886 <E\*7- @2. 5<<59-89</8, >< 2=1. +>270H  
( 21 \* , >; . 7=f7 E5\* ; 720\*<8, 2= <6 \* B\*58+8; 8@6 \* = ; 25/; 86 \* ; . \* 52; \* ; 2<2=1.  
| ; . \* = ; ° 2, 27\* =22; \* ; B° 87-8, =26 H\$. . =1. 186. 9\*Q R1=90N2; \* ; B74>H->NS/8, \*  
, 8695= 52=20H

/ 8;>; <@25? \* ; B->; 20&72. ; <2B185 \* B9. ; 2- <E2 <>6 6. ; < <27<E\*7- +. =@. . 7< 6. <= ; 4H  
~ 8, \*-- 227\*52/8, 6 \* =27 \* +8>=1. 52; \* ; B\*7- 2< < ; ?2. <E3087 =8=1. 186. 9\*Q \* =  
52; \* ; B74>H-> 8, \* 5=1. 2/8, 6 \* =27-. <4\* =RlaeSac^Q` ach' >. <27<6 \* B+. . 6 \* 25- 8  
; /- . 9=74>H->H

' - . \$ 2 " + - . % ' "/ ++ , # 2 2  
~ 52 fl& <=>- . 7< \* ; . \* >=86 \* =2\* 536. 6+. ; <2=1. fl 7=>, 4B' 2=>\*5&72. ; <2B2; \* ; BE@121  
\* 53@< \* , . . <<=8- \* =\*+< <\*7- 18520<8/>72. ; <2B52; \* ; 2<\* ; 8<<=1. <= \* = H%1. ; . \* ; . 8=1. ;

<9, 25< ;?2. <\*?\*B+5 \*<@. 5H%85\*;768;. \*+8>=1. < ;. <8>;. <, 87<5=1. f)' & @. +<2  
\*=@@H4B?>18;0 \*7- , 52487 =1. 574L~8; f)' & <=>. 7=HM

' - . \$ 2 " ' , . +

%d. . -" (' + ( , , " (' % - ' 2+. <987<25 /8; 2<>20\*7- ;. 7. @20, . ; =22\* = <  
/8; \*5fl 7=>, 4B= \*, 1. ; <\*7- \*-622=>\*8; <H/d. ! \$ @8; 4<, 5< 5@21 5, \*5< 1885- 2=>2=>2  
=1. 12209; 8. <<=8. 7<>;. \* 9; 89. ; 5; ;. -. 7=25- . ->, \*8; 2. ?.; B9; 8/. <<27\*598<227 2  
fl 7=>, 4B< 1885H\$=// \*58@8; 4<@21 fl 7=>, 4B, 850 <\*7- >72. ; <22 <E8>-<8/O=>=  
2<2>=27<E\*7- 7\*=27\*5 ?\*5\* =27\*0 7, 2<H~8; -. =\*2- 2/8; 6\* =27 87 52. 7<>;. 9; 8. . ->;. <  
\*7- <=7- \*; - </8; fl 7=>, 4BE95 \* < ?22=1. 2 @. +<2 \* =1=9GN@@@H4B 9<+H. =H