

7 7

9

Revised
S P%P%P P PP P Òå Ò!B p P

(+ - ! + ' '\$ 2 ' " / + , " - 2
7 7 " ' . - " (' %
" , , " (' - - &

practitioners/scholars*7- =1. 2. //, -2. 7. <<*<5*-.; <+BG)) increasing their knowledge, skills, and dispositions; 2) enhancing their ability to inspire others within their institutions to contribute to their community to excel; and 3) engaging themselves and their institutions to increase the economic, social, and environmental viability, and livability of =1. 2. 8. 0*72* =87<*7- , 86. 6 >71

!

PROGRAM OF STUDY

(. ' - " (' , (+ * . " + < & F' - , & , - + ! (. + ,
" " d\] ē *-. ; <12G . ; <87*5*7- ! ; 8/ . <<87*5 . ; <9. =2. <RS
" " d\^ ° 87= 6 98 *; Bfk<. <2 #. 087*5\$= @*; - <12RS
" " d_ %*7<8 6 *2. ē *-. ; <12RS
" " d^e #. 087*5\$= @*; - <12G ° 85+8; *2. ! ; 83. =RS

, + ! : " , , + - - " (' * . " <F E& ' - & , - + ! (. + ,
" " d\] ^ 7 f7=8-> =87=8^, =87#. < *;, 1E^, *-. 6 2 (; 220E*7- =1. " 2< ; =87! ; 8. <<RS
" " d\] " >*52*2. #. < *;, 1RS
" " d\^ &7-. ; <*7- 20\$=2=2<RS
" " d\ e " 2< ; =87 \$ 6 2*; G - ?*7. . - . - >, * =87*5#. < *;, 1RS
" " ded " 2< ; =87#. < *;, 1RQ^S

) " % " 3 - " (' * . " + E & ' - & =, - + ! (. + ,
" " d^] ž ; 0*72* =87<*<\$8, 25\$B< 6 <RS
" " d^a ! . ; /8 6 *7. . ^ 99. *2*5. ?*5* =20! . 895 *7- ! ; 80 *6 <RS
" " d\^ ē *- 20=1; 8>01 %, 17850RS
" " d\ ē *-. ; <12 2 *1 >52>5> *5\$8, 2 =RS

(' - > ' (+ , & ' - , 5 + - " " <E, I5 & & - , ? ! (. + ,
%1. , 807* = 2- . <207. - =89, 8?2. /5A22B2, 188<2089=87<=1; 8>01 @121 *-- 287*5*. * <
8/2= ; . <-, *7 +. <=> 2-H - 287*5. ; =22* =87* ; . * <E. . ; =22* =E*7-N; 98<0 * < ; <
, 8> < @8 4/86 *; 8<<=1. >72. ; <2B6 *B+. 2, 5- . - 2 =12* ; . * H 5* < , 87<5@21 B8>;
*-?28, * +8>=<00 < - , 8> < <*7- *; . * <8/<=>- BH

(' -) - " (' ,
" " d^& ē 0*5*7- =12*5fk<. </8. . - >, * =87*5. *-. ; <RS
" " d\ \ %*7<8 6 *2. ° >; 2>56 ". <20RS
" " bda ' . <= ! ; * , =2. <2 ° 850 % *, 120RS

" ! + . - " (' (' -) - " (' ,
" " d\ \ / 2=8B8/&/\$/ 201. ; . - >, * =87 X ° >; . 7=fk<. <RS
" " d\] &7-. ; <*7- 20=1. & \$ ° 850 \$=> . 7=RS
" " d\^ ž ; 0*72* =87 *7- - 6 22= =87 8// 201. ; . - >, * =87 RS
" " d\ _ f7= ; 7* =87*5' 201. ; . - >, * =87 RS
" " de` \$9. , 25%892<2 " 8 =8; 8/ . - >, * =87 2 . - H *-. ; <12RQS

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

R12 semester hours \$

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

R21 semester hours

L E D ' - + (. - " (' - (' 5 , + &!" + " - - ! 5 " , , + - - " (' + > G,?
L *; 720 * <> 8, 2 = <@ 25+. 2 = 8 >, . - 8 = 1. 9, 8, << 8 / - 2 <; = 27 *, = 27 ;, < *;, 1 2, 5 - 20 = 1.
. ? 596. 7 = 8 = 1. 2 9, 898 * 5 - 1 * = @ 25+, 86. = 1. / 8, >< 8 / = 1. 2, . < *;, 1 H L *; 720 * <> 8, 2 = <
@ 25. ? 59 *, * - 6 2 @; 270 < 25 * 7 - < 25 2, ; 22 > 20 = 1. 2, . < *;, 1 2, ; * >; . * < @. 5 * <
< * = 02 < / 8, - . ? 5920; . < *;, 1 2, . * < H

L E E % " - - " / , , * G!?
L *; 720 * <> 8, 2 = <@ 25+. 2 = 8 >, . - 8 >; * 2 * = 2, . < *;, 1, . 5 = - 8 = 1. - . ? 596. 7 = 8 / * 7
*, = 27 ;, < *;, 1 - 2 <; = 27 <> - B H 592 <@ 25 2, 5 - . . < *;, 1 9 *, * - 26 < / 8, : >; * 2 * = 2, - . < 27 <
. ? 5920 < ? B N >. << 277 * 2, < - . ? 5920 >. << 27 < / 8, * 7 - * 7 * 5C 2 = ; ? 2 @ F * 7 -
2, ; 9, . = 20 >; * 2 * = 2, . < *;, 1 <> - 2 < H L *; 720 * <> 8, 2 = <@ 25 * 7 * 5C ;, * - 20 < = 1 * = / 8, >< 87
>; * 2 * = 2, . < *;, 1 - . < 27 < H

L E F +, - ' " ' - - " , - " , , > G ?
L *; 720 * <> 8, 2 = <@ 25 > 7 - . ; < * 7 - 18 @ - 8 >< E * 99 BE * 7 - 2 = ; 9, . = = Q, << E, 8, ;, 5 = 27 * 7 -
. 0, << 27 E 87, 0 *, = 8, ^ Z z ' ^ E * 7 - ^ 1 2, >; . H L *; 720 * <> 8, 2 = <@ 25 * 58, A * 6 2, * 7 - +, * + 5
= 8 2 = ; 9, . = 6 > 52 * = 8, ^ Z z ' ^ E, 0, << 27 * 7 - ^ Z ^ Z ' ^ H L *; 720 * <> 8, 2 = <@ 25 * 7 * 5C
; , * - 20 < = 1 * = / 8, >< 87 2 /, . 7 = 25 < = 2 = 2 < * < @. 5 * < = 18 < @ 121 / 8, >< 87 6 2 - 6, . = 18 <
R >; * 2 * = 2, * 7 - : > * 7 = 2 * = 2, . < *;, 1 - . < 27 < H 1 2, 8 > < < 9 * 7 < 6 > 525 < 6, < ; < H

L H M, , + - - " (' & " > G ?
L *; 720 * <> 8, 2 = <@ 25. ? 59 = 1. 2 *, = 27 ;, < *;, 1 - 2 <; = 27 9, 898 * 51 % 892 <@ 25 2, 5 - .
2 = 0 * = 27 8 /, . < *;, 1 6, . = 18 - 830 BE 6, * < ;, 6, 7 E * 7 - < * = 2 = 2 < F, . < *;, 1, . = 12 < F #, = 27 20 F
= 6, 6 * 7 * 0 6, 7 F * 7 - 7 * ? 2 * = 20 = 1, 8 > 01 = 1. - 2 <; = 27 9, 8, . < H

L M L " , , + + * , A , A ' 6 ` @ Q " A P o U % 5 • % 5 r 700 à , ! % 2 A • 6' L H M O P D ' A ! %

R12 Semester hoursS

L F E + ' " 3 - " (' , , , (>G% 2 , - & ,
% 2, 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, . ?B><*7- . 6, . ;020;. < *; , 1 *7- - . ;220
2 95* =27</8, 9, 8/. <<27*59,* , =2. H

L F I + (+ & ')) + " , % 6 / % . - " ' >G)% ' + (+ & ,
% 2, 8>; < *--; . << =1. =1. 8, 2 <E9, 8/. <<27*5*99, 8*, 1. <E*7- >7- ; <*7- 20</86 ?*; B><
9B 18802*59, ; <9, . =2. <*< =1. B; . 5= =8- . ? 592 0E5 *- 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*0 6. 7=9, 8/. <<27</8, <<220*7 8, 0*72* =27K, *9*, 2B/8, , 87=2>8><0, 8@=1H

L G F " ' - ! + (. ! ! ' (2 >
% 2, 8>; < . A95B. < =1. 8, 2 <E6 8- . 5E; . < *; , 1E9,* , =2*5*995* =27<E, > ;. 7=2<>. <E*7- , > ;. 7= *99, 8*, 1. <=8, . - >, * =27*5, 17880B 5 *- ; <12H B/8, >2087 =1. 2=0 * =27 8/ =, 17880B
2=8, > ; 2>56 E9, - *080BE <1885B, 0*72* =27 6 *7*0 6. 7E*7- <1885B, 0*72* =27
5 *- ; <12E=1. , 8>; < . A98< <5 *- ; <=8 * @2. ?*; 2-B8/] ^ <, . 7=> B= , 17880B 2<>. <Hd.

L G D + ' , (+ & - " / . + + " . % . & , " ' > G ?
% 2, 8>< /8,>< <87 *7 20. 9=1 <-> B8/,>;. 7==1. 8; B*7- ;. < *;, 1 *+8>=, >; 2>56 -. < 27
*7- 2<;. 5=27<29=8-. ?. 58920*7- <>=2209, 8/ <<27*55 *; 720, 866>722 <H
% 8>01 * 9, 8, . <<8/- 2, ><27E;. /5, =27E;. *- 20E- 2, 8?; BE- . < 2720E*7- <1*; 208/
. A9; 27, . < E5 *; 720* <<8, 2= <@25. ?. 589 * 95=8, 6 8/+ . 52/< *+8>=, >; 2>56 -. < 27H/1. B
@25. ?. 589 * 7 *>=1. 7=2, >; 2>56 /8 =1. 2 @8, 495, . *7- . 70*0 2=1. *7*5B28/- *-*=8
- . =; 6 2. 5 *; 7207.. - <*7- 8>=86. <8/ =1. 2, 527 <H/1. B@25. < 27 * <>+ <*7=2. E870820
9, 8/ <<27*5. ?. 5896. 7=957/8 =1. 2 @8, 495, . H

L F F % ' - ! " % , , , , (+ . - " (' % + , > G ?
% 2, 8>< 9, 8?2. <*, * < <-> B*99, 8*, 1=8>7-; <=7-, >;. 7=50*5*7- . =12*52 <>. </8,
5*-.; <2. ->, * <27*5 7?2876. 7=<H

J L I , - + - " , " (% % G ? ! ! !
% 22 * < 6 2*; 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. ; =20 <*: = -
. //, =2. 5B2 =1. , 5 << 886 E9, 2, 25 <8/ , 8>< - . < 27 *7- 957720E <= * =02 </8; 2, ;. * <20
< 22 *7=5 *; 720*7- . 70*0 6. 7=@21, 850 <>-. 7=<H

@

% . 28=1. ; 7 fl. 7=>, 4B&72. ; <2B" 8, =8; * =2. , ->, * <27*5L *-.; <122- . < 27. - =8. 71*7, .
=1. 5*-.; <12. //, =2. 7. <<8/5 *; 720* <<8, 2= <. 6 95B - 2 * +; 8*-; *70 8/25 < E6 *7B8/
@186 @8; 42. 6 95B - 2 & 8+ & + & +

+ " " , , (" - ,

° *7- 2 * = < * - 6 2 = - 8 = 1. . - H H 9, 80 * 6 * ; . / ; . - 8 * < L 5 * ; 720 * << 8, 2 = 4 M * = 1. ; = 1 * 7 = 1.
6 8. . B 92 * 5 L <=> - 7 = M. < 20 * 27 H A. ; . * 87 / 8; = 1 2 2 = 1 * = 1. & 72. ; < 2 B; . , 807 2 <= 1.
< 27 22 * 7 = 9, * = 2 * 5 A 9. ; 2 7, . < = 1 * =, * 7- 2 * = < +; 20 @ 21 = 1. 6 2 = 8 = 1. 9, 80 * 6 H * , > 5 B * 7-
, * 7- 2 * = < @ 25 @ 8; 4 = 80 = 1. ; * < * << 8, 2 = < 2 = 1. 5 * ; 720. 7 = ; 9, 2 + B / 8, 6 2 0, 86 6 > 722 < 8/
2: > 2 B - . < 20. - = 8 6. 5 = 1. 8; B @ 21 9, * , = 2. H A. 8 > 86. @ 25+. 9, * , = 287. ; Q, 185;
0 * - > * = < +, = ; 2 / 8, 6. - + B = 1. * 995 * = 27 8 / = 1. 8; B * 7- ; . < * ; , 1 * 7- / *, > 5 B. 71 * 7, . - + B
, > ; . 7 = ; . * 552 9, * , = 2. H

(! (+ - (%

%! . . - H H 9, 80 * 6 > 2 < * , 818 = 6 8. 5 2 @ 121 5 * ; 720
* << 8, 2 = < @ 25 9, 80. << = 1; 8 > 01 = 1. 9, 80 * 6 @ 21 * , 86 6 87 0 8 > 9
8/ 9. . < H ^ 4 B . 56. 7 = 8 / = 1. , 818 = - . < 20 2 * L B <= 6 M
8; 27 = 27 = 1 * = 5? . ; * 0 < 2 - 22 > * 5 = * 57 = 8 * -- ; . << 5; 0 ;
. 0 27 * 5. - >, * = 27 * 52 <>. < H ^ < 9 * ; = 8 / = 1. & 72. ; < 2 B < ; . 0 27 * 5
< @ * ; - < 1 2 / 8, > E * < 27 22 * 7 = 9 * ; = 8 / = 1. , 8. . * 7- < 9. , 25 2 * = 27
, 8 > < @ 8; 4 2, 8 98; * = < = * 6 Q * < - * , 222 < 2 @ 121 5 * ; 720
* << 8, 2 = < @ 25 +. 2 ? 85. - 2 . A 95; 2 0 ; . 0 27 * 5 . - >, * = 27 * 5 2 <>. < * 7- = 1. 7 E * < * = * 6 E
* = 6 9 = 2 0 = 8 98 = 2 2. 5 2 6 9 * , = * 7 2 6 98; = * 7 = 87, . ; 7, 18 < 7 + B = 1. 5 * ; 720 * << 8, 2 = 4 H ^ > ; = 1. ; E
* 4 B * << 6 9 = 27 2 = 1 2 * 99, 8 * , 1 2 = 1 * = 6 8 < 8 / = 1. 2 6 98; = * 7 = 87 * 52 <>. < , * 778 = +.
. . 85. - = 1; 8 > 01 2 - 22 > * 5 * 7- 285 = - . // 8 < <>, 1 * < * ; . , 86 6 87 2 6 * 7 B = * - 287 * 5 - 8, = 8 * 5
9, 80 * 6 < + > = ; * = 1. ; 6 > < = , 86. / 86 = * 6 * 7- 2 = ; * Q 7, B. // 8 < = 1 * = 2, ; . * < = 1. . // 2 * , B 8 /
= 1. 2 22 = 2. H

& " , , " (' (% " 2

- f7 B8>; 85 *<* 5*-.; E@1*=-8 B8> 189. 2B8>; 26 9*, =27 B8>; , 86 6> 72B*7-NB;
8,0*7Z*=&7
-

+ (

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

%1. ;. *1. 6 *7B-21. ;. 7=- . /2287</8, *1=87 ;. <*1, 1H\$86. *1. 21, 5- - +. 5@H /=. ;. *-20
 =1. < *7- 8=1. ;<EB8>6><- . ? 589 B8> - . /2287 0.8>7- - 21=18<, 2- - +B9>+521. -
 ;. <*1, 1. ;<H>8>6 *B, 188< =8, 87<2. ; - . /2287<8=1. ; =1*7=18< 52- - 1. ;. H =

$$2) , \quad \hat{E} \quad r \quad H \quad \hat{e} \cdot 1;$$

9.. < 7 - - =8<>998; =* <<; =B7Hd. , B 5 * 9. , <2. 5-. * 9578/*, =B7E*, =B7E8+<; ?* =B7E
*7- ;. /5, =B787=1. 8+<; ? - . //., <RHSH

& , 5 7 75 " % '\$" 0" 35 7 7 A . \$' & 5 7 > F D D L ? 7
" (, ' % , 5 6
7

%1. * , =B7; . < *; , 1 R #S98; =B78/! ^ # T9*; =22* =8B*, =B7; . < *; , 1U2- . /2. - * < * 6 > 52 =* 0
=B9. 8/; . < *; , 1 - . <D7. - =8B25 9*, =2*5. < 5, *9* + 5 8/ 29, 8? 20* < 9. , 22 * < 9. , =8/
9*, =2. *7- 6 *-. 9 > + 5 =8. 7* + 5 <; > =2B*7- = < 20Hd 22; * =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, =B7 * < * / 86 8/- * = E0220; . - . 7. . * 7-
. < 9. , = 8 2 => 22. B - ; 2. 7 6 86. 7 < * 7- . 921 * 72 < RHSH

, (' 5 7 A + . + 2 5 7 > , 7 ? > F D D L ? 7
> F 7 ? 7 ! (. , ' \$, 5 6 7

^ , =B7; . < *; , 1 2 * / 6 B8/9*, =2. < 8/ 2202: > 2B=1 * =* 2 < 2 * 0. * = ? *; 2 = B8/ @ * B E = 8 574
9*, =2. * 7- 2. * < 2 = 1. < ; 2. 8/ 1 > 6 * 7 / B > 2120 ^ , =B7; . < *; , 1 - 8. < 78 = < *; = / 86 *

v \in \mathbb{Z}^7 , $\|v\| = 1$.

Ľ *; 720* <> 8, 2 = <@181*? 78=, 86 95 = - = 1. - 2< ; = * = 87 /8>; B *; </86 = 1. < 6. < ; 2
@121 <@1. 9* << - = 1. , 86 9. 1. 7 <@1. * << << 6. 7=1*? = @889=87<=8. A = 7- = 1. = 6. G
ž

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

%d. E *-. ; \$ 185; ° 86 6 > 72BR\$° S, 87,. 9=@*<- . ? . 589. - *-=1. ^ ; 287* \$*= & 72. ; <2B
R 587 X ° 5; 4E^\\eSHd298,. <<*<<6. <=1*+=8=1 /*, >5B*7- 5*; 720* <<8, 2= <*; . . A9. ; =
7- <1. 185. ; <2=1. 5*; 72098,. <<Hd. /*, >5B*; . . A9. ; <2*9952- ;. <*; , 1E@; 220*7-
<185; 552; *=>; . *7- =1. 5*; 720* <<8, 2= <*; . . A9. ; <*7

+ . - " ('

է *; 720` <>8, 2= <6 >=<6 * 2= * 2 * 6 22 >6 _H\ O*- . 982= *?

=1. , 850 8//; 20=1. , 8>< H&75 <>=1. ;@2 ; . : >2. - +B*7 *,-. 62 -. 9*;=6. 7EB8>-8
 78=7. . - *99, 8?*58-; 89*, 8>< 2B8> 222= =1. -; 899, 28=1. 9>+21. - - . *- 57. =8
 -; 89H

(. +, " - ! + 0 % + (% " 2
 " * = </8; -; 89920*, 8>< 8; *-- 20*, 8>< *; . *?* 25+5 =85*; 720* <>8, 2= <87 =1.
 . *-. 62 * 57- *; 98< - 87 =1. Zf& @. +<2 1=90N. 02= *; H74H- >NH% . - * = <*; . 02. 7 /8
 *5=; 6 </8; . *, 1 < 6. < ; H! 5*< , 1. , 4=12 <2 /8 =1. , 8; . , =2/8; 6 * =87H

" - ! + 0 " ' +!(& + (+ &
 fIE*/=; 62=; 6EB8> @21 =8@21-; *@ , 8695= 5B/86 =1. 9, 80*6EB8> 7.. - =8 <+62* 5= =
 @21-; *@*5/8; 6 <20. - +B=1. - . *78/B8>; 850 Hf< >, =8 <@25+. 78=22- 8/ =1.
 @21-; *@*587; . ?2. - , 5 <>52<8, 2*50*-.; 8< ; <+B=1. Z//2. 8/ =1. #. 02= *; H%1.
 2<> , =8; 6*B78=2<>. * W*< =1. /2*50*-.; 8; B8> 2B8>-2 78=/2 8, 1*?. 9, 8. << - *
 -; 89N-- /8; 6 @21 =1. Z//2. 8/ =1. #. 02= *; 9, 28=1. 72=1 @. . 48/, 5 <<8, 1. , 4@21
 =1. Z//2. 8/ =1. #. 02= *; 8; . A. 9=87<-8=129852BH(. >7.. ; <*7- =1* =5*; 720* <>8, 2= <
 @25 A9; 27.. *?*; 2-B8/, 2, >6 <*7.. <=1* =@25/8.. =1. 6 =8@21-; *@ /86 *5; 8>< </8;
 87. < 6. < ; H/ 8@. ?. ; E@1. 7=128, ><2 =@8, 87<, >=2. < 6. < ; E@. @25@*7= =8. 7< ; .
 =1*=B8> 1*?. <*2/*, =8, 2B- . *5@21 =1. < , 2, >6 <*7.. <+; 8; . *5B@20B8> =8. 7; 85/8; *
 =12- < 6. < ; H><@25. . - =89, =287 =1. Z//2. 8/1 ; *->* =1; 80*6 < A952202 @; 220
 @1BB8><18>5 +. *5B@. - =8. 7; 85H%. *+8?. ; . 0>5 =87< *99B=8/*5*7- <9, 20] b@. . 4
 < 6. < ; H%1. - * = </8; <+66. ; E. 201=@. . 4/*5*7- <9, 20=; 6 <E*7- @2=; =; 6 *-- N; 89<
 - . 9, 7- >987 =1. < <27 2 @121 =1. , 8>< 2=4. 7H%. <9, 22- * = <*. ; 02. 7 2= =1.
 \$>66. ; \$1. - >5 8/° 5 << H%. 5 <- * = <8*-- 8; @21-; *@ /86 *, 8>< @25+. 9, 2= - 2
 =1. \$1. - >5 8/° 5 << </8; . *, 1 < 6. < ; H

+ ' , + (% " 2

* 55*; 720* <>8, 2= <@18 @*7= =8 =7< /; 0 *->* = , ; . - 2/86 *78=1. ; 2<>=87 =8 Zf& 6 ><
 /85B@ =1. 0>2. 57. <2= - +. 5B@G

' + % . ." % 8/225= *7<; 2=6 ><+; . . . 2. - 9, 28=8, 872. ; * =87 8/ =1. =*7< /; .
 ; . > <+H%1. =*7<; 2=6 ><, 5*; 5B <18@ =1* =1. , 8>< @8; 4=8+ . =*7< /; . . - @* <=4. 7 /8;
 0 *->* = , ; . - 2=7B, ; . - 2< . *; 7. - /86 * . 0B7*5B*, ; . - 2= <2= =87 6 *B+. =*7< /; . . - H
 Z 7B, 8>< <2 @121 * . 8. +. = ; @* < . *; 7. - 6 *B+. =*7< /; . . - H%1. 0 *-. <2 =1. < , 8><
 @2578=+ . /, =8. . - 2=8B8>; Zf& ! ^ >75 <<1. , 8>< <@. ; . =*4. 7 * <9*; =8/ =1. ! ; . * =;
 ^ 2, 27* =2 87<8; =26 8/° 850 <*7- &72. ; <22 <H

% % - + ' , + + " - , & . , - ! / ' + ' 0 " - ! " ' L 2 + , (- ! 0 + " "
 + "68, >6. 7 =87 8/, 8>< 2/86 * =87 6 ><+ . <+62= - @21 ; . > </8, =*7< /; H%1 2
 - 8, >6. 7 =87, *7 2, 5- . * , 8>< 5B+ ><8, * =50- . < ; 2= =87 Hf& 287 =1. < 6. < ;
 <B= 6 H 8>< <*4. 7 2 * - 2/. ; . 7 =B= 6 R>, 1 * < ; >*; = ; S@2578=+ . =*7< /; . . - 18> /8;
 18> H 7. : >*; = ; 18> 2. : >*5-8 Hb 8/* < 6. < ; 18> H

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^>;=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 * 1D1 : >*~~52E278?~~*=~~2~~ E*7- , 8<Q 7<~~22~~. -HH1 ->, *=~~87*5~~
Ł *-. ;<1D/8; />~~5B~~. 6 9~~BB~~ - ;. ~~08725~~; /1. ;ŁB=1. ! . *:~~*5~~~~3~~ ><287LD

" / + (. + , * . " + & ' - ,
` 9,80 * 6 - 2. , = 8, 6 * B@* 2. * 9,80 * 6 ; : > 2. 6. 7 = 87 BZ = 1. 9,898 < - @* 2. ; 278 = 2
? 25 = 27 8/* 7B9. ; 2. 7 => 72. ; < 2B. ; 0 > 5 = 27E9, 8. - > . 8; 9852 BH^ , 8 > < 6 D1 = +. @* 2. -
> 7. . ; 1. / 855@20, 2. > 6 < * 7. . G

Ø % 1. 5 *; 720 * <> 8, 2 = 1 * <* 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 > < +. < 2. - + B * 7. - H H, 80 * 6 - 2. , = 8, * 7 - * , 89B
< + 6 2 = - - 8 = 1. 0 * - > = 8 / 2. H f l * 9,80 * 6 ; : > 2. 6. 7 = 2 @* 2. - E = 1. 6 2 2 > 6 7 > 6 +. ; 8/
18 > < ; : > 2. - / 8, = 1. 9,80 * 6 2 > 7 * //, = - H f l 8 = 1. ; @8, - E * 78 = 1. ; , 8 > < 6 > < +.
< + < 2 > = - / 8, = 1. , 8 > < = 1 * = @* < @* 2. - H

&) . , , (. + ,

" + + 2 + / " ,
\$ = . B 2 ; *; B 2 B 8 > ; 95. . / 8; / 2 - 202 / 8, 6 * = 27E < - B 20 > 2 = 5E0 = 20 * + 2 = 8. * E @ 8; 420
870 8 > 99,83, = E6 * 420 * 7 * 9982 = 6. 7 = / 8, ; . < * ; , 1, 87 < = 27E, 1. , 420 B 8 > ; . Ø * 25 * 7-
6 >, 168. H % . 52 ; *; B, 87 = 2 < + 884 E 9. ; 2 * 5E * 7- 08. ; 76. 7 = - 8, > 6. 7 = 2 * - - 227 = 8
9,82 2 20 * , , <> 8. Q 884 E. 5, = 872 B > ; 7 * 5E * 7- 7 > 6. ; 8 > < / 50. A = . < 8 > ; , < + 8 = 1 87 * 7- 8 //
, * 6 > 4H \$; ? 2. < 2, 5 - . ; . < * ; , 1 * < 2 = 7. , R B 9187. E 2 9. ; < 87E + B. Ø * 258; + B 2 < = 7 =
6. < * 020 - > ; 20 < 5, = - 18 > ; < E 2 = ; 52 ; *; B 58 * 7E * , , < = 8 = 1. f l = ; 7. = * 7 - . Ø * 25 * 7-
. 5, = 872 ; . < ; ? . 6 * = ; 25H

* , 222 < 2, 5 - . , 86 9 > = ; 5 + < 87 = 1. / 2 < = 7 - / 8 > = 1 / 58, E @ 8, 4 < = 27 < = 7 - / 88 - 2 = 1. 8 > = ;
58 + + B E @ 8, 86 9 > = ; 0 > 29. - 0 8 > 90 > - B; 886 E * 7 - @ 2. 5 < = 59-89 < / 8 > < 2 = 1. + > 25 20H
(21 * , > ; , 7 = f l E 5 *; 720 * <> 8, 2 = < 6 * B * 58 + 8; 8 @ 6 * = ; 25 / 86 * ; . * 52 ; *; 2 < 2 = 1.
1 ; . * = ; ° 2, 27 * = 22; *; B ° 87 < 8, = 26 H \$. . = 1. 186. 9 * 0 R = 90N2; *; B 74 > H - > NS / 8, *
, 86 95 = 52 20H

/ 8 > < @ 25 *; B - > ; 20 & 72. ; < 2B1852 * B 9. ; 2 < E 2 < 6 6. ; < < 27E * 7 - +. = @. . 7 < 6. < ; H
` 8, * - - 227 * 52 / 8, 6 * = 27 * + 8 > = 1. 52 ; *; B * 7 - 2 < < ; ? 2. < E 5087 = 1. 186. 9 * 0 * =
52 ; *; B 74 > H - > 8, , * 5 = 1. 2 / 8, 6 * = 27 - . < 4 * = R dae Sac ^ Q ` ac H >. < 27 < 6 * B +. . Ø * 25 - = 8
; . / . 9 Y 74 > H - > H

' - . \$ 2 " + - . % ' " / + + , " 2 2
` 52 f l & < - . 7 < * ; . * > = 86 * = 2 * 5B6. 6 +. ; < 2 = 1. f l 7 =>, 4B' 2 => * 5 & 72. ; < 2B12; *; BE @ 121
* 5B @ < * , , < = 8 - * = * < < 7 - 185 20 < 8 / > 72. ; < 2B52; *; 2 < * ; 8 < = 1. < = H % . ; . * ; . 8 = 1. ;

<9, 25<;?2. <*?*2+5 *<@. 5H%85*;768,. *+8>=1. <;. <8>;. <, 87<5=1. f) ' & @. +2
*=@@@@HIB?>H8;0 *7-, 52487=1. 524L`8; f) ' & <>- . 7=<HM

' - . \$ 2 " ' , . +

%1. . . - " (' + (' , , " (' % - ' 2+. <987<25 /8; 2<20*7- ;. 7. @20,. ;=22*=<
/8 *5fl 7=>, 4B=*, 1. ;<*7- *- 6 22=8; <H1. ! \$ @8 4<, 5< 5@21 5, *5< 1885- 2=2<2
=1. 122098,. <>8. 7<;. * 9,89. ;5, ;. - . 7=25- . ->, *-8, 2. ?. ;B9,8/. <>87*598<287 2
fl 7=>, 4B< 1885H\$/*58@8 4<@21 fl 7=>, 4B, 850 <*7- >72. ;<22<E8>=8/Q=*=
2<2=>87<E*7- 7*>87*5 ?*5*>87*0 7, 24H`8; - . =*5- 2/8, 6*>87 87 2. 7<;. 9,8,. ->;. <
*7- <*7- *;- </8; fl 7=>, 4B95*< ?22=1. 2@. +2 *-1=90N@@@@HIB 9<H. H