0	**3,090**	**96.14**	**96.14**
1	**124**	**3.86**	**100.00**
Total	**3,214**	**100.00**	

```
1 .         recode summtran (1=.)(0=1), gen (summerpersist)
(3214 differences between summtran and summerpersist)

2 .         tab summerpersist
```

RECODE of summtran (SummTran)	Freq.	Percent	Cum.
1	**3,090**	**100.00**	**100.00**
Total	**3,090**	**100.00**	

```
3 .         tab summerpersist if winterpersist==1 //2958 students left
```

RECODE of summtran (SummTran)	Freq.	Percent	Cum.
1	**2,958**	**100.00**	**100.00**
Total	**2,958**	**100.00**	

```
4 .
5 . **First Term Credits Attempted
6 . des semcratt
```

variable name	storage type	display format	value label	variable label
semcratt	float	%9.0g		**SemCrAtt**

```
7 . sum semcratt
```

Variable	Obs	Mean	Std. Dev.	Min	Max
semcratt	**3,214**	**9.722309**	**3.934055**	**.5**	**22.5**

```
8 . hist semcratt
(bin=35, start=.5, width=.62857143)

9 . tab semcratt
```

SemCrAtt	Freq.	Percent	Cum.
.5	**1**	**0.03**	**0.03**
1	**35**	**1.09**	**1.12**
2	**21**	**0.65**	**1.77**
3	**143**	**4.45**	**6.22**
3.5	**7**	**0.22**	**6.44**
4	**343**	**10.67**	**17.11**
4.5	**22**	**0.68**	**17.80**
5	**49**	**1.52**	**19.32**
5.5	**1**	**0.03**	**19.35**
6	**158**	**4.92**	**24.27**
6.5	**20**	**0.62**	**24.89**
7	**157**	**4.88**	**29.78**
7.5	**22**	**0.68**	**30.46**
8	**278**	**8.65**	**39.11**
8.5	**41**	**1.28**	**40.39**
9	**105**	**3.27**	**43.65**
9.5	**28**	**0.87**	**44.52**

10	**105**	**3.27**	**47.79**
10.5	**17**	**0.53**	**48.32**
11	**93**	**2.89**	**51.21**
11.5	**26**	**0.81**	**52.02**
12	**575**	**17.89**	**69.91**
12.5	**123**	**3.83**	**73.74**
13	**309**	**9.61**	**83.35**
13.5	**64**	**1.99**	**85.35**
14	**221**	**6.88**	**92.22**
14.5	**38**	**1.18**	**93.40**
15	**89**	**2.77**	**96.17**
15.5	**13**	**0.40**	**96.58**
16	**62**	**1.93**	**98.51**
16.5	**15**	**0.47**	**98.97**
17	**19**	**0.59**	**99.56**
17.5	**7**	**0.22**	**99.78**
18	**3**	**0.09**	**99.88**
19	**2**	**0.06**	**99.94**
19.5	**1**	**0.03**	**99.97**
22.5	**1**	**0.03**	**100.00**
Total	**3,214**	**100.00**	

```
10 .
11 .         *Generate New Variable Called semcrattX to show the three category of first term credits
12 .         cap drop semcrattX

13 .         recode semcratt (0.5/5.5=1) (6/12=2) (12.5/22.5=3), gen (semcrattX)
(3179 differences between semcratt and semcrattX)

14 .         tab semcrattX
```

RECODE of semcratt (SemCrAtt)	Freq.	Percent	Cum.
1	**622**	**19.35**	**19.35**
2	**1,625**	**50.56**	**69.91**
3	**967**	**30.09**	**100.00**
Total	**3,214**	**100.00**	

```
15 .         hist semcrattX
(bin=35, start=1, width=.05714286)

16 .
17 .         graph pie,over(semcrattX) plabel(_all percent)

18 .
19 . **First Term College-level Credits earned
20 . sum fallcollcredits
```

Variable	Obs	Mean	Std. Dev.	Min	Max
fallcollcr~s	**3,214**	**5.83323**	**5.013757**	**0**	**22.5**

```
21 . hist fallcollcredits
(bin=35, start=0, width=.64285714)

22 . tab fallcollcredits
```

FallCollCredits	Freq.	Percent	Cum.
0	778	24.21	24.21
.5	39	1.21	25.42
1	95	2.96	28.38
1.5	4	0.12	28.50
2	43	1.34	29.84
3	288	8.96	38.80
3.5	19	0.59	39.39
4	365	11.36	50.75
4.5	18	0.56	51.31
5	66	2.05	53.36
5.5	6	0.19	53.55
6	171	5.32	58.87
6.5	8	0.25	59.12
7	128	3.98	63.10
7.5	7	0.22	63.32
8	148	4.60	67.92
8.5	14	0.44	68.36
9	124	3.86	72.22
9.5	12	0.37	72.59
10	147	4.57	77.16
10.5	11	0.34	77.50
11	69	2.15	79.65
11.5	9	0.28	79.93
12	187	5.82	85.75
12.5	16	0.50	86.25
13	176	5.48	91.72
13.5	21	0.65	92.38
14	107	3.33	95.71
14.5	11	0.34	96.05
15	44	1.37	97.42
15.5	6	0.19	97.60
16	44	1.37	98.97
16.5	11	0.34	99.32
17	13	0.40	99.72
17.5	3	0.09	99.81
18	3	0.09	99.91
19	2	0.06	99.97
22.5	1	0.03	100.00
Total	3,214	100.00	

```
23 .
24 .         *Generate New Variable Called fallcollcreditsX to show the three category of first term
> dits earned
25 .         cap drop fallcollcreditsX

26 .         recode fallcollcredits (0/5.5=1) (6/12=2) (12.5/22.5=3), gen (fallcollcreditsX)
(3119 differences between fallcollcredits and fallcollcreditsX)
```

```
27 .         tab fallcollcreditsX
```

RECODE of fallcollcredits (FallCollCredits)	Freq.	Percent	Cum.
1	1,721	53.55	53.55
2	1,035	32.20	85.75
3	458	14.25	100.00
Total	3,214	100.00	

```
28 .         hist fallcollcreditsX
(bin=35, start=1, width=.05714286)

29 .
30 .         graph pie,over(fallcollcreditsX) plabel(_all percent)

31 .
32 . **College-level Credits Earned in First Year
33 . sum fyrcollcredit
```

Variable	Obs	Mean	Std. Dev.	Min	Max
fyrcollcre~t	3,214	17.28718	9.449358	0	61.5

```
34 . hist fyrcollcredit
(bin=35, start=0, width=1.7571429)

35 . tab fyrcollcredit
```

FYrCollCredit	Freq.	Percent	Cum.
0	18	0.56	0.56
.5	3	0.09	0.65
1	19	0.59	1.24
2	10	0.31	1.56
3	66	2.05	3.61
3.5	4	0.12	3.73
4	217	6.75	10.49
4.5	18	0.56	11.05
5	36	1.12	12.17
6	84	2.61	14.78
6.5	8	0.25	15.03
7	91	2.83	17.86
7.5	7	0.22	18.08
8	135	4.20	22.28
8.5	16	0.50	22.78
9	63	1.96	24.74
9.5	10	0.31	25.05
10	66	2.05	27.10
10.5	8	0.25	27.35
11	57	1.77	29.12
11.5	15	0.47	29.59
12	195	6.07	35.66
12.5	36	1.12	36.78
13	108	3.36	40.14
13.5	28	0.87	41.01
14	82	2.55	43.56
14.5	16	0.50	44.06
15	77	2.40	46.45
15.5	15	0.47	46.92
16	88	2.74	49.66
16.5	10	0.31	49.97

17	72	2.24	52.21
17.5	18	0.56	52.77
18	61	1.90	54.67
18.5	12	0.37	55.04
19	67	2.08	57.13
19.5	26	0.81	57.93
20	101	3.14	61.08
20.5	20	0.62	61.70
21	79	2.46	64.16
21.5	15	0.47	64.62
22	93	2.89	67.52
22.5	15	0.47	67.98
23	71	2.21	70.19
23.5	15	0.47	70.66
24	132	4.11	74.77
24.5	21	0.65	75.42
25	128	3.98	79.40
25.5	21	0.65	80.06
26	99	3.08	83.14
26.5	20	0.62	83.76
27	67	2.08	85.84
27.5	16	0.50	86.34
28	49	1.52	87.87
28.5	13	0.40	88.27
29	52	1.62	89.89
29.5	6	0.19	90.07
30	44	1.37	91.44
30.5	11	0.34	91.79
31	30	0.93	92.72
31.5	7	0.22	92.94
32	33	1.03	93.96
32.5	4	0.12	94.09
33	29	0.90	94.99
33.5	3	0.09	95.08
34	25	0.78	95.86
34.5	7	0.22	96.08
35	17	0.53	96.61
35.5	5	0.16	96.76
36	14	0.44	97.20
36.5	4	0.12	97.32
37	21	0.65	97.98
37.5	3	0.09	98.07
38	14	0.44	98.51
38.5	4	0.12	98.63
39	12	0.37	99.00
39.5	3	0.09	99.10
40	7	0.22	99.32
40.5	2	0.06	99.38
41	3	0.09	99.47
41.5	3	0.09	99.56
42	3	0.09	99.66
44	4	0.12	99.78
45	1	0.03	99.81
46	1	0.03	99.84
47	1	0.03	99.88
47.5	1	0.03	99.91
49.5	2	0.06	99.97
61.5	1	0.03	100.00
Total	3,214	100.00	

```
36 .
37 .         *Generate New Variable Called fallcollcreditsX to show the three category of first year
   > dits earned
38 .         cap drop fyrcollcreditX

39 .         recode fyrcollcredit (0/14.5=1) (15/24=2) (24.5/61.5=3), gen (fyrcollcreditX)
   (3195 differences between fyrcollcredit and fyrcollcreditX)

40 .         hist fyrcollcreditX
   (bin=35, start=1, width=.05714286)

41 .         sum fyrcollcreditX
```

Variable	Obs	Mean	Std. Dev.	Min	Max
fyrcollcre~X	**3,214**	**1.811761**	**.8109727**	**1**	**3**

```
42 .
43 .         graph pie,over(fyrcollcreditX) plabel(_all percent)

44 .
45 .
46 .
47 . *****Clean the Control Variable
48 . *female
49 . sum sex
```

Variable	Obs	Mean	Std. Dev.	Min	Max
sex	**0**				

```
50 . des sex
```

variable name	storage type	display format	value label	variable label
sex	str1	%9s		**SEX**

```
51 .
52 . cap drop female

53 . gen female=.
   (3,214 missing values generated)

54 . replace female=1 if sex=="F"
   (1,647 real changes made)

55 . replace female=2 if sex=="M"
   (1,567 real changes made)

56 .
57 . sum female
```

Variable	Obs	Mean	Std. Dev.	Min	Max
female	**3,214**	**1.487554**	**.4999229**	**1**	**2**

```
58 . tab female
```

female	Freq.	Percent	Cum.
1	**1,647**	**51.24**	**51.24**
2	**1,567**	**48.76**	**100.00**
Total	**3,214**	**100.00**	

```
59 .
60 .
61 . *race //Generate dummy variables
62 . lookfor eth
```

variable name	storage type	display format	value label	variable label
ethx	str8	%9s		**Ethx**

```
63 . codebook ethx
```

ethx

```
                  type:  string (str8)

         unique values:  6                        missing "":  0/3,214

            tabulation:  Freq.  Value
                            98  "Asian"
                           620  "Black"
                           117  "Hispanic"
                           146  "Other"
                           114  "Unknown"
                         2,119  "White"
```

```
64 .
65 . tab ethx,gen(x)
```

Ethx	Freq.	Percent	Cum.
Asian	**98**	**3.05**	**3.05**
Black	**620**	**19.29**	**22.34**
Hispanic	**117**	**3.64**	**25.98**
Other	**146**	**4.54**	**30.52**
Unknown	**114**	**3.55**	**34.07**
White	**2,119**	**65.93**	**100.00**
Total	**3,214**	**100.00**	

```
66 . rename x1 asian

67 . rename x2 black
```

```
68 . rename x3 hispanic

69 . rename x4 other

70 . rename x5 unknown

71 .
72 . cap drop white

73 . rename x6 white

74 .
75 . tab asian, m
```

ethx==Asian	Freq.	Percent	Cum.
0	**3,116**	**96.95**	**96.95**
1	**98**	**3.05**	**100.00**
Total	**3,214**	**100.00**	

```
76 .
77 . /*
>   tabulation:  Freq.  Value
>                             98  "Asian"
>                            620  "Black"
>                            117  "Hispanic"
>                            146  "Other"
>                            114  "Unknown"
>                           2119  "White"
> */
78 .
79 .
80 .
81 . *age
82 . lookfor age
```

variable name	storage type	display format	value label	variable label
agex	str5	%9s		**Agex**

```
83 . des agex
```

variable name	storage type	display format	value label	variable label
agex	str5	%9s		**Agex**

```
84 . tab agex
```

Agex	Freq.	Percent	Cum.
19-24	**1,171**	**36.43**	**36.43**
25-50	**761**	**23.68**	**60.11**
<19	**1,282**	**39.89**	**100.00**
Total	**3,214**	**100.00**	

```
85 .
86 . cap drop ageX

87 . gen ageX=.
(3,214 missing values generated)

88 . replace ageX=1 if agex=="<19"
(1,282 real changes made)

89 . replace ageX=2 if agex=="19-24"
(1,171 real changes made)

90 . replace ageX=3 if agex=="25-50"
(761 real changes made)

91 .
92 . tab ageX
```

ageX	Freq.	Percent	Cum.
1	**1,282**	**39.89**	**39.89**
2	**1,171**	**36.43**	**76.32**
3	**761**	**23.68**	**100.00**
Total	**3,214**	**100.00**	

```
93 . des ageX
```

variable name	storage type	display format	value label	variable label
ageX	float	%9.0g		

```
94 .
95 . *pell
96 . lookfor pell
```

variable name	storage type	display format	value label	variable label
pell	byte	%8.0g		**PELL**

```
97 . des pell
```

variable name	storage type	display format	value label	variable label
pell	byte	%8.0g		**PELL**

```
98 . sum pell
```

Variable	Obs	Mean	Std. Dev.	Min	Max
pell	**3,214**	**.4337274**	**.4956656**	**0**	**1**

```
 99 . tab pell
```

PELL	Freq.	Percent	Cum.
0	**1,820**	**56.63**	**56.63**
1	**1,394**	**43.37**	**100.00**
Total	**3,214**	**100.00**	

```
100 .
101 .
102 . *FTEIC
103 . des ftiac
```

variable name	storage type	display format	value label	variable label
ftiac	byte	%8.0g		**FTIAC**

```
104 . sum ftiac
```

Variable	Obs	Mean	Std. Dev.	Min	Max
ftiac	**3,214**	**.5955196**	**.4908676**	**0**	**1**

```
105 . tab ftiac
```

FTIAC	Freq.	Percent	Cum.
0	**1,300**	**40.45**	**40.45**
1	**1,914**	**59.55**	**100.00**
Total	**3,214**	**100.00**	

```
106 .
107 . *GPA
108 . lookfor gpa
```

variable name	storage type	display format	value label	variable label
semgpa	float	%9.0g		**SemGPA**
fyrcumgpa	float	%9.0g		**FYrCumGPA**

```
109 . sum semgpa
```

Variable	Obs	Mean	Std. Dev.	Min	Max
semgpa	**3,214**	**2.494873**	**1.456922**	**0**	**4**

```
110 . tab semgpa
```

SemGPA	Freq.	Percent	Cum.
0	**618**	**19.23**	**19.23**
.21	**3**	**0.09**	**19.32**
.28	**1**	**0.03**	**19.35**
.2833333	**1**	**0.03**	**19.38**
.2857143	**1**	**0.03**	**19.42**
.3	**4**	**0.12**	**19.54**
.3333333	**2**	**0.06**	**19.60**
.35	**2**	**0.06**	**19.66**
.39	**2**	**0.06**	**19.73**
.4	**2**	**0.06**	**19.79**
.4285714	**1**	**0.03**	**19.82**
.4333333	**2**	**0.06**	**19.88**
.4666667	**1**	**0.03**	**19.91**

.5	2	0.06	19.98
.525	1	0.03	20.01
.5307692	1	0.03	20.04
.5454546	1	0.03	20.07
.5666667	1	0.03	20.10
.5714286	4	0.12	20.22
.6	4	0.12	20.35
.625	1	0.03	20.38
.6666667	3	0.09	20.47
.68	1	0.03	20.50
.6923077	1	0.03	20.54
.7	10	0.31	20.85
.7285714	2	0.06	20.91
.7428572	2	0.06	20.97
.75	2	0.06	21.03
.7666667	5	0.16	21.19
.7846154	1	0.03	21.22
.8	4	0.12	21.34
.82	1	0.03	21.38
.8307692	1	0.03	21.41
.8363636	1	0.03	21.44
.8384615	1	0.03	21.47
.85	3	0.09	21.56
.8571429	5	0.16	21.72
.9	2	0.06	21.78
.92	1	0.03	21.81
.925	2	0.06	21.87
.9857143	1	0.03	21.90
1	29	0.90	22.81
1.015385	1	0.03	22.84
1.057143	1	0.03	22.87
1.075	1	0.03	22.90
1.08	1	0.03	22.93
1.083333	1	0.03	22.96
1.084615	1	0.03	22.99
1.11	1	0.03	23.02
1.128571	1	0.03	23.06
1.141667	1	0.03	23.09
1.142857	1	0.03	23.12
1.15	3	0.09	23.21
1.157143	3	0.09	23.30
1.175	3	0.09	23.40
1.2	4	0.12	23.52
1.207143	1	0.03	23.55
1.208333	1	0.03	23.58
1.22	1	0.03	23.62
1.223077	1	0.03	23.65
1.228571	1	0.03	23.68
1.233333	1	0.03	23.71
1.25	3	0.09	23.80
1.285714	2	0.06	23.86
1.3	6	0.19	24.05
1.314286	2	0.06	24.11
1.32	1	0.03	24.14
1.333333	5	0.16	24.30
1.35	5	0.16	24.46
1.363636	1	0.03	24.49
1.375	1	0.03	24.52
1.4	1	0.03	24.55
1.414286	1	0.03	24.58
1.416667	1	0.03	24.61
1.433333	4	0.12	24.74
1.44	1	0.03	24.77
1.453846	1	0.03	24.80
1.469231	1	0.03	24.83
1.483333	1	0.03	24.86
1.491667	1	0.03	24.89

1.5	**13**	**0.40**	**25.30**
1.53	**1**	**0.03**	**25.33**
1.538462	**1**	**0.03**	**25.36**
1.542857	**1**	**0.03**	**25.39**
1.55	**1**	**0.03**	**25.42**
1.553846	**1**	**0.03**	**25.45**
1.566667	**3**	**0.09**	**25.54**
1.571429	**1**	**0.03**	**25.58**
1.575	**2**	**0.06**	**25.64**
1.6	**1**	**0.03**	**25.67**
1.615385	**1**	**0.03**	**25.70**
1.623077	**1**	**0.03**	**25.73**
1.633333	**1**	**0.03**	**25.76**
1.645455	**1**	**0.03**	**25.79**
1.65	**5**	**0.16**	**25.95**
1.654545	**1**	**0.03**	**25.98**
1.66	**1**	**0.03**	**26.01**
1.661538	**1**	**0.03**	**26.04**
1.666667	**3**	**0.09**	**26.14**
1.684615	**1**	**0.03**	**26.17**
1.692857	**1**	**0.03**	**26.20**
1.7	**17**	**0.53**	**26.73**
1.714286	**2**	**0.06**	**26.79**
1.72	**1**	**0.03**	**26.82**
1.725	**2**	**0.06**	**26.88**
1.73	**1**	**0.03**	**26.91**
1.733333	**1**	**0.03**	**26.94**
1.75	**3**	**0.09**	**27.04**
1.758333	**1**	**0.03**	**27.07**
1.766667	**4**	**0.12**	**27.19**
1.775	**1**	**0.03**	**27.22**
1.79	**1**	**0.03**	**27.26**
1.792308	**1**	**0.03**	**27.29**
1.8	**5**	**0.16**	**27.44**
1.818182	**1**	**0.03**	**27.47**
1.82	**2**	**0.06**	**27.54**
1.825	**3**	**0.09**	**27.63**
1.828571	**1**	**0.03**	**27.66**
1.83	**1**	**0.03**	**27.69**
1.838462	**1**	**0.03**	**27.72**
1.842857	**1**	**0.03**	**27.75**
1.85	**10**	**0.31**	**28.06**
1.853846	**2**	**0.06**	**28.13**
1.864286	**1**	**0.03**	**28.16**
1.9	**3**	**0.09**	**28.25**
1.91	**3**	**0.09**	**28.34**
1.927273	**1**	**0.03**	**28.38**
1.930769	**1**	**0.03**	**28.41**
1.938462	**1**	**0.03**	**28.44**
1.971429	**1**	**0.03**	**28.47**
1.98	**1**	**0.03**	**28.50**
1.9875	**2**	**0.06**	**28.56**
2	**88**	**2.74**	**31.30**
2.0125	**1**	**0.03**	**31.33**
2.014286	**1**	**0.03**	**31.36**
2.021429	**1**	**0.03**	**31.39**
2.022222	**1**	**0.03**	**31.43**
2.033333	**1**	**0.03**	**31.46**
2.053846	**1**	**0.03**	**31.49**
2.064286	**1**	**0.03**	**31.52**
2.075	**2**	**0.06**	**31.58**
2.09	**1**	**0.03**	**31.61**
2.1	**7**	**0.22**	**31.83**
2.1125	**1**	**0.03**	**31.86**
2.125	**1**	**0.03**	**31.89**
2.128572	**2**	**0.06**	**31.95**
2.133333	**3**	**0.09**	**32.05**

2.138462	1	0.03	32.08
2.142857	1	0.03	32.11
2.15	5	0.16	32.27
2.153846	1	0.03	32.30
2.163636	1	0.03	32.33
2.17	1	0.03	32.36
2.172727	1	0.03	32.39
2.181818	1	0.03	32.42
2.192308	1	0.03	32.45
2.2	3	0.09	32.55
2.207143	1	0.03	32.58
2.22	1	0.03	32.61
2.225	1	0.03	32.64
2.230769	1	0.03	32.67
2.233333	4	0.12	32.79
2.24	1	0.03	32.83
2.246154	1	0.03	32.86
2.25	2	0.06	32.92
2.257143	1	0.03	32.95
2.266667	4	0.12	33.07
2.28	1	0.03	33.11
2.292857	1	0.03	33.14
2.3	40	1.24	34.38
2.306667	1	0.03	34.41
2.308333	1	0.03	34.44
2.3125	1	0.03	34.47
2.316667	1	0.03	34.51
2.32	1	0.03	34.54
2.323077	1	0.03	34.57
2.325	2	0.06	34.63
2.333333	3	0.09	34.72
2.35	12	0.37	35.10
2.353846	1	0.03	35.13
2.366667	1	0.03	35.16
2.385714	1	0.03	35.19
2.39	1	0.03	35.22
2.391667	1	0.03	35.25
2.392308	2	0.06	35.31
2.4	4	0.12	35.44
2.406667	1	0.03	35.47
2.416667	1	0.03	35.50
2.42	1	0.03	35.53
2.425	2	0.06	35.59
2.428571	3	0.09	35.69
2.433333	6	0.19	35.87
2.436364	1	0.03	35.91
2.4375	1	0.03	35.94
2.442857	1	0.03	35.97
2.45	2	0.06	36.03
2.454545	1	0.03	36.06
2.457143	1	0.03	36.09
2.458333	1	0.03	36.12
2.461539	3	0.09	36.22
2.463636	3	0.09	36.31
2.466667	5	0.16	36.47
2.469231	1	0.03	36.50
2.471429	2	0.06	36.56
2.475	2	0.06	36.62
2.49	1	0.03	36.65
2.490909	1	0.03	36.68
2.5	30	0.93	37.62
2.508333	2	0.06	37.68
2.51	3	0.09	37.77
2.511111	1	0.03	37.80
2.514286	1	0.03	37.83
2.515385	2	0.06	37.90
2.516667	2	0.06	37.96

2.52	3	0.09	38.05
2.523077	1	0.03	38.08
2.527273	1	0.03	38.11
2.528571	2	0.06	38.18
2.530769	1	0.03	38.21
2.533333	2	0.06	38.27
2.538461	1	0.03	38.30
2.54	1	0.03	38.33
2.542857	1	0.03	38.36
2.545455	1	0.03	38.39
2.546154	1	0.03	38.43
2.554545	1	0.03	38.46
2.557143	4	0.12	38.58
2.564286	1	0.03	38.61
2.566667	8	0.25	38.86
2.571429	3	0.09	38.95
2.572727	1	0.03	38.99
2.575	1	0.03	39.02
2.578571	1	0.03	39.05
2.58	1	0.03	39.08
2.586667	1	0.03	39.11
2.5875	1	0.03	39.14
2.588889	1	0.03	39.17
2.6	8	0.25	39.42
2.609091	1	0.03	39.45
2.61	2	0.06	39.51
2.615385	2	0.06	39.58
2.62	2	0.06	39.64
2.628572	3	0.09	39.73
2.630769	1	0.03	39.76
2.633333	1	0.03	39.79
2.6375	1	0.03	39.83
2.64	1	0.03	39.86
2.642857	2	0.06	39.92
2.65	15	0.47	40.39
2.657143	2	0.06	40.45
2.658333	1	0.03	40.48
2.66	2	0.06	40.54
2.663636	2	0.06	40.60
2.666667	3	0.09	40.70
2.675	1	0.03	40.73
2.676923	1	0.03	40.76
2.677778	1	0.03	40.79
2.68	2	0.06	40.85
2.7	43	1.34	42.19
2.705882	1	0.03	42.22
2.7125	1	0.03	42.25
2.715385	1	0.03	42.28
2.716667	2	0.06	42.35
2.72	1	0.03	42.38
2.725	1	0.03	42.41
2.727273	2	0.06	42.47
2.728571	1	0.03	42.50
2.733333	2	0.06	42.56
2.735714	1	0.03	42.59
2.742857	1	0.03	42.63
2.745455	1	0.03	42.66
2.75	5	0.16	42.81
2.753846	1	0.03	42.84
2.758333	1	0.03	42.87
2.763636	1	0.03	42.91
2.766667	9	0.28	43.19
2.769231	1	0.03	43.22
2.772727	1	0.03	43.25
2.775	1	0.03	43.28
2.78	2	0.06	43.34
2.783333	1	0.03	43.37

2.785714	1	0.03	43.40
2.791667	1	0.03	43.43
2.792308	1	0.03	43.47
2.8	14	0.44	43.90
2.807143	2	0.06	43.96
2.809091	2	0.06	44.03
2.82	4	0.12	44.15
2.825	1	0.03	44.18
2.828571	5	0.16	44.34
2.833333	1	0.03	44.37
2.838462	5	0.16	44.52
2.842857	1	0.03	44.56
2.846154	2	0.06	44.62
2.85	12	0.37	44.99
2.853846	1	0.03	45.02
2.857143	5	0.16	45.18
2.861538	2	0.06	45.24
2.864286	1	0.03	45.27
2.866667	1	0.03	45.30
2.870588	1	0.03	45.33
2.871428	2	0.06	45.40
2.872727	1	0.03	45.43
2.875	1	0.03	45.46
2.877778	1	0.03	45.49
2.88	3	0.09	45.58
2.88125	1	0.03	45.61
2.890909	2	0.06	45.68
2.891667	1	0.03	45.71
2.892857	1	0.03	45.74
2.9	16	0.50	46.24
2.908333	3	0.09	46.33
2.914286	1	0.03	46.36
2.918182	1	0.03	46.39
2.921429	1	0.03	46.42
2.925	2	0.06	46.48
2.926667	1	0.03	46.52
2.927273	1	0.03	46.55
2.928571	2	0.06	46.61
2.93	1	0.03	46.64
2.930769	1	0.03	46.67
2.933333	1	0.03	46.70
2.935714	1	0.03	46.73
2.938462	1	0.03	46.76
2.946154	3	0.09	46.86
2.95	2	0.06	46.92
2.955555	1	0.03	46.95
2.957143	3	0.09	47.04
2.9625	2	0.06	47.11
2.969231	1	0.03	47.14
2.971429	1	0.03	47.17
2.972727	1	0.03	47.20
2.976923	1	0.03	47.23
2.98	4	0.12	47.36
2.985714	1	0.03	47.39
2.990909	1	0.03	47.42
2.992308	1	0.03	47.45
2.99375	1	0.03	47.48
3	124	3.86	51.34
3.00625	1	0.03	51.37
3.007692	1	0.03	51.40
3.009091	1	0.03	51.43
3.015385	1	0.03	51.46
3.018182	1	0.03	51.49
3.01875	1	0.03	51.52
3.02	1	0.03	51.56
3.022222	1	0.03	51.59
3.023077	2	0.06	51.65

3.025	2	0.06	51.71
3.028571	1	0.03	51.74
3.03	1	0.03	51.77
3.035714	1	0.03	51.80
3.041667	1	0.03	51.84
3.042857	3	0.09	51.93
3.05	3	0.09	52.02
3.053846	1	0.03	52.05
3.058333	1	0.03	52.08
3.06	2	0.06	52.15
3.069231	1	0.03	52.18
3.07	1	0.03	52.21
3.071429	2	0.06	52.27
3.075	3	0.09	52.36
3.076923	2	0.06	52.43
3.08	1	0.03	52.46
3.085714	3	0.09	52.55
3.0875	1	0.03	52.58
3.090909	1	0.03	52.61
3.092308	2	0.06	52.68
3.1	7	0.22	52.89
3.109091	2	0.06	52.96
3.111111	1	0.03	52.99
3.113333	1	0.03	53.02
3.114286	1	0.03	53.05
3.116667	2	0.06	53.11
3.12	3	0.09	53.20
3.125	1	0.03	53.24
3.126667	1	0.03	53.27
3.128572	7	0.22	53.48
3.133333	3	0.09	53.58
3.135714	1	0.03	53.61
3.138462	5	0.16	53.76
3.14	3	0.09	53.86
3.141667	1	0.03	53.89
3.142857	2	0.06	53.95
3.145455	1	0.03	53.98
3.146154	1	0.03	54.01
3.15	21	0.65	54.67
3.153846	1	0.03	54.70
3.154546	1	0.03	54.73
3.163636	1	0.03	54.76
3.171429	1	0.03	54.79
3.175	4	0.12	54.92
3.176923	1	0.03	54.95
3.18	2	0.06	55.01
3.181818	1	0.03	55.04
3.184615	1	0.03	55.07
3.185714	1	0.03	55.10
3.1875	1	0.03	55.13
3.19	1	0.03	55.16
3.190909	4	0.12	55.29
3.192308	1	0.03	55.32
3.192857	2	0.06	55.38
3.2	14	0.44	55.82
3.207692	1	0.03	55.85
3.21	2	0.06	55.91
3.2125	1	0.03	55.94
3.214286	4	0.12	56.07
3.216667	1	0.03	56.10
3.22	3	0.09	56.19
3.225	1	0.03	56.22
3.230769	1	0.03	56.25
3.233333	11	0.34	56.60
3.235714	2	0.06	56.66
3.2375	1	0.03	56.69
3.24	1	0.03	56.72

3.241667	1	0.03	56.75
3.25	3	0.09	56.85
3.253846	1	0.03	56.88
3.254545	1	0.03	56.91
3.25625	1	0.03	56.94
3.257143	2	0.06	57.00
3.2625	1	0.03	57.03
3.264286	2	0.06	57.09
3.266667	2	0.06	57.16
3.269231	1	0.03	57.19
3.27	1	0.03	57.22
3.271429	4	0.12	57.34
3.272727	3	0.09	57.44
3.275	2	0.06	57.50
3.278571	2	0.06	57.56
3.28	4	0.12	57.69
3.281818	2	0.06	57.75
3.285714	3	0.09	57.84
3.286667	1	0.03	57.87
3.2875	1	0.03	57.90
3.288235	1	0.03	57.93
3.291667	2	0.06	58.00
3.29375	1	0.03	58.03
3.3	71	2.21	60.24
3.307143	2	0.06	60.30
3.307692	6	0.19	60.49
3.310526	1	0.03	60.52
3.311111	2	0.06	60.58
3.32	1	0.03	60.61
3.321429	1	0.03	60.64
3.323077	2	0.06	60.70
3.325	1	0.03	60.73
3.326667	2	0.06	60.80
3.33	1	0.03	60.83
3.330769	2	0.06	60.89
3.333333	17	0.53	61.42
3.342857	1	0.03	61.45
3.346667	1	0.03	61.48
3.35	24	0.75	62.23
3.358333	1	0.03	62.26
3.358824	2	0.06	62.32
3.361538	1	0.03	62.35
3.3625	2	0.06	62.41
3.369231	2	0.06	62.48
3.371428	1	0.03	62.51
3.375	1	0.03	62.54
3.376923	4	0.12	62.66
3.381818	3	0.09	62.76
3.385714	1	0.03	62.79
3.39	1	0.03	62.82
3.392308	6	0.19	63.01
3.392857	1	0.03	63.04
3.4	10	0.31	63.35
3.408333	1	0.03	63.38
3.414286	2	0.06	63.44
3.416667	1	0.03	63.47
3.42	1	0.03	63.50
3.422222	2	0.06	63.57
3.423077	1	0.03	63.60
3.425	4	0.12	63.72
3.428571	8	0.25	63.97
3.433333	9	0.28	64.25
3.435714	2	0.06	64.31
3.442857	3	0.09	64.41
3.446154	2	0.06	64.47
3.45	4	0.12	64.59
3.454545	2	0.06	64.65

3.458333	1	0.03	64.69
3.46	2	0.06	64.75
3.4625	1	0.03	64.78
3.463636	1	0.03	64.81
3.466667	3	0.09	64.90
3.469231	1	0.03	64.93
3.471429	4	0.12	65.06
3.472727	2	0.06	65.12
3.475	2	0.06	65.18
3.478571	2	0.06	65.25
3.48	2	0.06	65.31
3.483333	2	0.06	65.37
3.484615	2	0.06	65.43
3.49	2	0.06	65.49
3.490909	1	0.03	65.53
3.492857	1	0.03	65.56
3.493333	1	0.03	65.59
3.5	34	1.06	66.65
3.50625	1	0.03	66.68
3.506667	1	0.03	66.71
3.51	3	0.09	66.80
3.516667	1	0.03	66.83
3.523077	2	0.06	66.89
3.525	2	0.06	66.96
3.527273	3	0.09	67.05
3.528571	2	0.06	67.11
3.529412	1	0.03	67.14
3.530769	1	0.03	67.17
3.533333	4	0.12	67.30
3.536364	3	0.09	67.39
3.538461	3	0.09	67.49
3.54	2	0.06	67.55
3.546667	4	0.12	67.67
3.55	2	0.06	67.73
3.552941	1	0.03	67.77
3.553333	1	0.03	67.80
3.553846	2	0.06	67.86
3.554545	3	0.09	67.95
3.555556	1	0.03	67.98
3.557143	1	0.03	68.01
3.561538	1	0.03	68.05
3.5625	1	0.03	68.08
3.564286	3	0.09	68.17
3.566667	15	0.47	68.64
3.571429	3	0.09	68.73
3.573333	1	0.03	68.76
3.575	6	0.19	68.95
3.576471	1	0.03	68.98
3.58	2	0.06	69.04
3.58125	1	0.03	69.07
3.583333	1	0.03	69.10
3.584615	1	0.03	69.14
3.585714	2	0.06	69.20
3.591667	2	0.06	69.26
3.593333	1	0.03	69.29
3.594445	1	0.03	69.32
3.6	20	0.62	69.94
3.607692	2	0.06	70.01
3.608333	1	0.03	70.04
3.61	2	0.06	70.10
3.616667	1	0.03	70.13
3.623077	1	0.03	70.16
3.625	2	0.06	70.22
3.63	1	0.03	70.26
3.633333	1	0.03	70.29
3.635714	4	0.12	70.41
3.636364	4	0.12	70.54

3.638462	1	0.03	70.57
3.638889	1	0.03	70.60
3.641176	1	0.03	70.63
3.642857	1	0.03	70.66
3.646154	1	0.03	70.69
3.65	23	0.72	71.41
3.653333	1	0.03	71.44
3.66	1	0.03	71.47
3.663636	1	0.03	71.50
3.666667	14	0.44	71.94
3.67	1	0.03	71.97
3.673333	1	0.03	72.00
3.675	4	0.12	72.12
3.681818	1	0.03	72.15
3.688889	3	0.09	72.25
3.692308	3	0.09	72.34
3.7	114	3.55	75.89
3.708333	1	0.03	75.92
3.714286	3	0.09	76.01
3.715385	1	0.03	76.04
3.72	1	0.03	76.07
3.721429	2	0.06	76.14
3.725	3	0.09	76.23
3.727273	2	0.06	76.29
3.730769	2	0.06	76.35
3.733333	3	0.09	76.45
3.745455	2	0.06	76.51
3.746154	2	0.06	76.57
3.75	7	0.22	76.79
3.753333	1	0.03	76.82
3.755556	1	0.03	76.85
3.76	6	0.19	77.04
3.764706	1	0.03	77.07
3.766667	7	0.22	77.29
3.769231	7	0.22	77.50
3.775	2	0.06	77.57
3.78	1	0.03	77.60
3.783333	2	0.06	77.66
3.784615	4	0.12	77.78
3.785714	5	0.16	77.94
3.79	2	0.06	78.00
3.792308	1	0.03	78.03
3.8	18	0.56	78.59
3.808333	1	0.03	78.62
3.809091	2	0.06	78.69
3.8125	3	0.09	78.78
3.814286	1	0.03	78.81
3.82	1	0.03	78.84
3.825	7	0.22	79.06
3.828571	12	0.37	79.43
3.833333	4	0.12	79.56
3.835714	1	0.03	79.59
3.838462	3	0.09	79.68
3.84	1	0.03	79.71
3.841667	1	0.03	79.74
3.85	37	1.15	80.90
3.86	1	0.03	80.93
3.861538	3	0.09	81.02
3.866667	1	0.03	81.05
3.86875	1	0.03	81.08
3.871428	7	0.22	81.30
3.875	1	0.03	81.33
3.88	6	0.19	81.52
3.881818	1	0.03	81.55
3.883333	2	0.06	81.61
3.884615	1	0.03	81.64
3.890909	4	0.12	81.77

3.891667	1	0.03	81.80
3.892857	1	0.03	81.83
3.893333	1	0.03	81.86
3.9	14	0.44	82.30
3.907692	6	0.19	82.48
3.91	2	0.06	82.55
3.914286	6	0.19	82.73
3.918182	3	0.09	82.83
3.92	5	0.16	82.98
3.925	14	0.44	83.42
3.929412	1	0.03	83.45
3.930769	10	0.31	83.76
3.935714	5	0.16	83.91
3.94	2	0.06	83.98
3.941667	1	0.03	84.01
3.94375	1	0.03	84.04
3.945455	1	0.03	84.07
3.947059	1	0.03	84.10
3.95	2	0.06	84.16
3.952631	1	0.03	84.19
3.966667	1	0.03	84.23
3.972727	1	0.03	84.26
3.975	2	0.06	84.32
3.976923	1	0.03	84.35
4	503	15.65	100.00
Total	3,214	100.00	

```
111 . hist semgpa
    (bin=35, start=0, width=.11428571)

112 .
113 . cap drop semgpaX

114 . recode semgpa (0/2.99375=0) (3/4=1), gen (semgpaX)
    (2596 differences between semgpa and semgpaX)

115 . hist semgpaX
    (bin=35, start=0, width=.02857143)

116 . tab semgpaX
```

RECODE of semgpa (SemGPA)	Freq.	Percent	Cum.
0	1,526	47.48	47.48
1	1,688	52.52	100.00
Total	3,214	100.00	

```
117 .
    end of do-file

118 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"
```

```
119 . global outcome1 "winterenl_new"

120 . global outcome2 "summenl_new"

121 . global outcome "deg"

122 .
123 . *Global Covariates
124 . global cov1 "pass_math pass_read pass_write"

125 . global cov11 "engcollpass mathcollpass"

126 . global cov12 "engmathcollpass"

127 .
128 . global cov2 "semcrattX"

129 .
130 . global cov3 "fyrcollcreditX"

131 . global cov31 "semcrattX fyrcollcreditX" //Multicollinearity?

132 . global cov32 "semcrattX fyrcollcreditX engcollpass mathcollpass"

133 . global cov33 "semcrattX fyrcollcreditX engmathcollpass"

134 .
135 .
136 . global control "female asian black hispanic other unknown ageX pell ftiac semgpa"

137 . global control1 "female asian black hispanic other unknown ageX pell ftiac semgpaX"

138 .
    end of do-file

139 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

140 . logit $outcome1 $cov1 $control, robust

    Iteration 0:   log pseudolikelihood =  -1785.605
    Iteration 1:   log pseudolikelihood = -1488.0094
    Iteration 2:   log pseudolikelihood = -1472.0702
    Iteration 3:   log pseudolikelihood = -1471.9919
    Iteration 4:   log pseudolikelihood = -1471.9919

    Logistic regression                             Number of obs     =      3,214
                                                    Wald chi2(13)     =     491.39
                                                    Prob > chi2       =     0.0000
    Log pseudolikelihood = -1471.9919               Pseudo R2         =     0.1756

    ------------------------------------------------------------------------------
                 |               Robust
    winterenl_new|      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
    -------------+----------------------------------------------------------------
       pass_math |  -.0745061     .08349    -0.89   0.372    -.2381434    .0891313
       pass_read |  -.1180144   .0980724    -1.20   0.229    -.3102327    .0742039
      pass_write |   .3001381   .0918056     3.27   0.001     .1202024    .4800738
          female |   .0010387   .0928675     0.01   0.991    -.1809783    .1830556
           asian |  -.0831243   .3424755    -0.24   0.808    -.7543639    .5881154
           black |   .0172872   .1226664     0.14   0.888    -.2231346     .257709
        hispanic |  -.3961943   .2163484    -1.83   0.067    -.8202294    .0278408
           other |   .0511203    .224444     0.23   0.820    -.3887819    .4910224
         unknown |  -.0288511   .2523648    -0.11   0.909     -.523477    .4657748
            ageX |  -.6714913   .0713579    -9.41   0.000    -.8113502   -.5316323
            pell |   .7324754   .1058261     6.92   0.000     .5250601    .9398906
           ftiac |   .1549323   .1106505     1.40   0.161    -.0619386    .3718032
          semgpa |   .6388848   .0337545    18.93   0.000     .5727272    .7050423
```

_cons	.456344	.317008	1.44	0.150	-.1649802	1.077668

```
141 .
    end of do-file

142 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

143 . keep if winterpersist==1
    (204 observations deleted)

144 .
    end of do-file

145 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

146 . logit $outcome2 $cov1 $control, robust

    Iteration 0:   log pseudolikelihood = -1738.7628
    Iteration 1:   log pseudolikelihood = -1643.7581
    Iteration 2:   log pseudolikelihood = -1641.0633
    Iteration 3:   log pseudolikelihood = -1641.0602
    Iteration 4:   log pseudolikelihood = -1641.0602

    Logistic regression                             Number of obs     =      3,010
                                                    Wald chi2(13)     =     155.24
                                                    Prob > chi2       =     0.0000
    Log pseudolikelihood = -1641.0602               Pseudo R2         =     0.0562
```

summenl_new	Coef.	Robust Std. Err.	z	P>|z|	[95% Conf.	Interval]
pass_math	-.043913	.0845187	-0.52	0.603	-.2095666	.1217405
pass_read	-.040121	.1032079	-0.39	0.697	-.2424047	.1621626
pass_write	.0959551	.0979205	0.98	0.327	-.0959655	.2878758
female	-.1355656	.08656	-1.57	0.117	-.3052201	.0340889
asian	.2254221	.2482985	0.91	0.364	-.2612341	.7120783
black	.1870631	.1235026	1.51	0.130	-.0549976	.4291238
hispanic	-.074524	.2371313	-0.31	0.753	-.5392927	.3902448
other	.5496812	.1898428	2.90	0.004	.1775961	.9217663
unknown	.2320701	.2302746	1.01	0.314	-.2192599	.6834001
ageX	.0552998	.0633068	0.87	0.382	-.0687793	.1793789
pell	.3665033	.0916138	4.00	0.000	.1869436	.546063
ftiac	.074741	.1038532	0.72	0.472	-.1288075	.2782894
semgpa	.4292521	.0388593	11.05	0.000	.3530893	.5054149
_cons	-2.386202	.3182248	-7.50	0.000	-3.009911	-1.762492

```
147 .
    end of do-file

148 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

149 . mlogit $outcome $cov2 $control, baseoutcome(1)

    Iteration 0:   log likelihood = -3140.8954
    Iteration 1:   log likelihood = -2739.0124
    Iteration 2:   log likelihood = -2695.6766
    Iteration 3:   log likelihood = -2693.9833
    Iteration 4:   log likelihood = -2693.9818
    Iteration 5:   log likelihood = -2693.9818
```

Multinomial logistic regression

Number of obs	= 3,010
LR chi2(33)	= 893.83
Prob > chi2	= 0.0000
Pseudo R2	= 0.1423

Log likelihood = -2693.9818

deg	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	(base outcome)					
2						
semcrattX	-.1985759	.0965856	-2.06	0.040	-.3878801	-.0092717
female	-.9035153	.1308827	-6.90	0.000	-1.160041	-.6469899
asian	.2797235	.3353356	0.83	0.404	-.3775222	.9369692
black	.0114203	.1750624	0.07	0.948	-.3316956	.3545363
hispanic	.146389	.3301315	0.44	0.657	-.500657	.7934349
other	-.2062898	.3194953	-0.65	0.518	-.832489	.4199094
unknown	-.0597962	.337663	-0.18	0.859	-.7216034	.6020111
ageX	.032817	.0917552	0.36	0.721	-.14702	.2126539
pell	-.0200835	.1359902	-0.15	0.883	-.2866194	.2464523
ftiac	.2109598	.1464335	1.44	0.150	-.0760447	.4979642
semgpa	.624394	.0576785	10.83	0.000	.5113461	.7374418
_cons	-1.893031	.4150123	-4.56	0.000	-2.70644	-1.079622
3						
semcrattX	.4907308	.1019203	4.81	0.000	.2909708	.6904909
female	-.2590983	.1310786	-1.98	0.048	-.5160076	-.002189
asian	-.3594359	.4943274	-0.73	0.467	-1.3283	.6094281
black	-.7005057	.2274417	-3.08	0.002	-1.146283	-.2547281
hispanic	-.4095063	.3978543	-1.03	0.303	-1.189286	.3702737
other	.0926467	.289622	0.32	0.749	-.475002	.6602953
unknown	.1773713	.3265814	0.54	0.587	-.4627165	.817459
ageX	-.2476818	.1049657	-2.36	0.018	-.4534108	-.0419527
pell	-.001579	.140473	-0.01	0.991	-.2769011	.2737431
ftiac	-.0608968	.1633062	-0.37	0.709	-.380971	.2591774
semgpa	.7337726	.0707325	10.37	0.000	.5951394	.8724058
_cons	-3.956296	.4715538	-8.39	0.000	-4.880525	-3.032068
4						
semcrattX	.6186605	.0931525	6.64	0.000	.4360851	.8012359
female	-.3916418	.1209255	-3.24	0.001	-.6286514	-.1546321
asian	.885112	.3246534	2.73	0.006	.248803	1.521421
black	-.6397625	.2223672	-2.88	0.004	-1.075594	-.2039308
hispanic	.0978807	.304168	0.32	0.748	-.4982776	.694039
other	-.0333134	.2922009	-0.11	0.909	-.6060167	.5393899
unknown	.1340424	.3125522	0.43	0.668	-.4785487	.7466335
ageX	-.780033	.1103391	-7.07	0.000	-.9962937	-.5637723
pell	-.5047328	.1342018	-3.76	0.000	-.7677634	-.2417022
ftiac	-.5211683	.1603499	-3.25	0.001	-.8354484	-.2068882
semgpa	1.008466	.0783015	12.88	0.000	.8549978	1.161934
_cons	-3.349726	.4722429	-7.09	0.000	-4.275305	-2.424147

```
150 .
end of do-file
```

```
151 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

152 . mlogit $outcome $cov3 $control, baseoutcome(1)

Iteration 0:   log likelihood = -3140.8954
Iteration 1:   log likelihood = -2703.6385
Iteration 2:   log likelihood = -2652.9946
Iteration 3:   log likelihood = -2651.0371
Iteration 4:   log likelihood = -2651.0335
Iteration 5:   log likelihood = -2651.0335

Multinomial logistic regression                 Number of obs     =      3,010
                                                LR chi2(33)       =     979.72
                                                Prob > chi2       =     0.0000
Log likelihood = -2651.0335                     Pseudo R2         =     0.1560
```

deg	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	(base outcome)					
2						
fyrcollcreditX	.145177	.0811869	1.79	0.074	-.0139464	.3043004
female	-.9411216	.1308097	-7.19	0.000	-1.197504	-.6847393
asian	.3195894	.3321966	0.96	0.336	-.3315039	.9706828
black	.0193992	.1747924	0.11	0.912	-.3231875	.361986
hispanic	.1298381	.3317046	0.39	0.695	-.520291	.7799671
other	-.2197802	.3199639	-0.69	0.492	-.8468979	.4073375
unknown	-.0356199	.3373663	-0.11	0.916	-.6968457	.6256058
ageX	.1158642	.0897129	1.29	0.197	-.0599699	.2916983
pell	-.1521805	.1351614	-1.13	0.260	-.417092	.1127309
ftiac	.2241406	.1456125	1.54	0.124	-.0612546	.5095358
semgpa	.6129305	.0589382	10.40	0.000	.4974138	.7284472
_cons	-2.583283	.3752328	-6.88	0.000	-3.318726	-1.84784
3						
fyrcollcreditX	.7122031	.0859739	8.28	0.000	.5436973	.8807088
female	-.3023555	.1326024	-2.28	0.023	-.5622515	-.0424594
asian	-.3526476	.4944045	-0.71	0.476	-1.321663	.6163673
black	-.7625889	.2291726	-3.33	0.001	-1.211759	-.313419
hispanic	-.3999393	.4037302	-0.99	0.322	-1.191236	.3913573
other	-.0185794	.2947041	-0.06	0.950	-.5961887	.55903
unknown	.0963839	.3299554	0.29	0.770	-.5503168	.7430847
ageX	-.2123422	.1050683	-2.02	0.043	-.4182722	-.0064121
pell	-.1093107	.1427864	-0.77	0.444	-.3891668	.1705455
ftiac	-.0538905	.165031	-0.33	0.744	-.3773453	.2695642
semgpa	.6493991	.0723976	8.97	0.000	.5075023	.7912959
_cons	-4.001641	.4321748	-9.26	0.000	-4.848688	-3.154594
4						
fyrcollcreditX	.8541958	.0798687	10.69	0.000	.6976559	1.010736
female	-.4575942	.1235755	-3.70	0.000	-.6997976	-.2153907
asian	.9087923	.3285021	2.77	0.006	.26494	1.552645
black	-.7017909	.2250021	-3.12	0.002	-1.142787	-.2607949
hispanic	.0669369	.3158242	0.21	0.832	-.5520671	.6859409
other	-.1771255	.2992862	-0.59	0.554	-.7637156	.4094647
unknown	.0266483	.3178185	0.08	0.933	-.5962646	.6495611
ageX	-.7427951	.1109524	-6.69	0.000	-.9602578	-.5253324
pell	-.6118548	.1372132	-4.46	0.000	-.8807879	-.3429218
ftiac	-.5273031	.1629067	-3.24	0.001	-.8465943	-.2080119
semgpa	.9203526	.0800345	11.50	0.000	.7634879	1.077217
_cons	-3.368314	.438273	-7.69	0.000	-4.227314	-2.509315

```
153 .
    end of do-file

154 . tab winterenl_new
```

winterEnl_new	Freq.	Percent	Cum.
0	**784**	**26.05**	**26.05**
1	**2,226**	**73.95**	**100.00**
Total	**3,010**	**100.00**	

```
155 . tab summenl_new
```

summEnl_new	Freq.	Percent	Cum.
0	**2,214**	**73.55**	**73.55**
1	**796**	**26.45**	**100.00**
Total	**3,010**	**100.00**	

```
156 . tab pass_math
```

pass_math	Freq.	Percent	Cum.
0	**144**	**4.78**	**4.78**
1	**389**	**12.92**	**17.71**
2	**2,477**	**82.29**	**100.00**
Total	**3,010**	**100.00**	

```
157 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

158 .         recode pass_math (0=0) (1 2=1)
    (pass_math: 2477 changes made)

159 .
    end of do-file

160 . tab pass_math
```

pass_math	Freq.	Percent	Cum.
0	**144**	**4.78**	**4.78**
1	**2,866**	**95.22**	**100.00**
Total	**3,010**	**100.00**	

```
161 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

162 .         tab pass_read
```

pass_read	Freq.	Percent	Cum.
0	**164**	**5.45**	**5.45**
1	**413**	**13.72**	**19.17**
2	**2,433**	**80.83**	**100.00**
Total	**3,010**	**100.00**	

```
163 .
    end of do-file

164 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

165 .         recode pass_read (0=0) (1 2=1)
    (pass_read: 2433 changes made)

166 .
    end of do-file

167 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

168 .         recode pass_write (0=0) (1 2=1)
    (pass_write: 2338 changes made)

169 .
    end of do-file

170 . tab engcollpass
```

EngCollPass	Freq.	Percent	Cum.
0	**319**	**10.60**	**10.60**
1	**1,100**	**36.54**	**47.14**
2	**1,591**	**52.86**	**100.00**
Total	**3,010**	**100.00**	

```
171 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

172 .         tab mathcollpass
```

MathCollPass	Freq.	Percent	Cum.
0	**183**	**6.08**	**6.08**
1	**645**	**21.43**	**27.51**
2	**2,182**	**72.49**	**100.00**
Total	**3,010**	**100.00**	

```
173 .
    end of do-file

174 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

175 .         recode mathcollpass (0=0) (1 2=1)
    (mathcollpass: 2182 changes made)

176 .
    end of do-file

177 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"
```

```
178 .         tab engcollpass
```

EngCollPass	Freq.	Percent	Cum.
0	**319**	**10.60**	**10.60**
1	**1,100**	**36.54**	**47.14**
2	**1,591**	**52.86**	**100.00**
Total	**3,010**	**100.00**	

```
179 .
    end of do-file

180 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

181 .         tab engcollpass
```

EngCollPass	Freq.	Percent	Cum.
0	**319**	**10.60**	**10.60**
1	**1,100**	**36.54**	**47.14**
2	**1,591**	**52.86**	**100.00**
Total	**3,010**	**100.00**	

```
182 .
    end of do-file

183 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

184 .         recode engcollpass (0=0) (1 2=1)
    (engcollpass: 1591 changes made)

185 .
    end of do-file

186 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

187 .         tab engcollpass
```

EngCollPass	Freq.	Percent	Cum.
0	**319**	**10.60**	**10.60**
1	**2,691**	**89.40**	**100.00**
Total	**3,010**	**100.00**	

```
188 .
    end of do-file

189 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

190 . global outcome1 "winterenl_new"

191 . global outcome2 "summenl_new"
```

```
192 . global outcome "deg"

193 .
194 . *Global Covariates
195 . global cov1 "pass_math pass_read pass_write"

196 . global cov11 "engcollpass mathcollpass"

197 . global cov12 "engmathcollpass"

198 .
199 . global cov2 "semcrattX"

200 .
201 . global cov3 "fyrcollcreditX"

202 . global cov31 "semcrattX fyrcollcreditX" //Multicollinearity?

203 . global cov32 "semcrattX fyrcollcreditX engcollpass mathcollpass"

204 . global cov33 "semcrattX fyrcollcreditX engmathcollpass"

205 .
206 .
207 . global control "female asian black hispanic other unknown ageX pell ftiac semgpa"

208 . global control1 "female asian black hispanic other unknown ageX pell ftiac semgpaX"

209 .
end of do-file

210 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

211 . logit $outcome1 $cov1 $control, robust

Iteration 0:   log pseudolikelihood =  -1726.364
Iteration 1:   log pseudolikelihood = -1373.3812
Iteration 2:   log pseudolikelihood = -1354.2556
Iteration 3:   log pseudolikelihood = -1354.1817
Iteration 4:   log pseudolikelihood = -1354.1817

Logistic regression                             Number of obs     =      3,010
                                                Wald chi2(13)     =     538.78
                                                Prob > chi2       =     0.0000
Log pseudolikelihood = -1354.1817               Pseudo R2         =     0.2156

------------------------------------------------------------------------------
             |               Robust
winterenl_new|      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   pass_math |   .2148664   .1973564     1.09   0.276    -.171945    .6016778
   pass_read |   .5615728   .2086077     2.69   0.007     .1527092    .9704364
  pass_write |   1.190347   .1921712     6.19   0.000     .8136982    1.566996
      female |   .0801959   .0969418     0.83   0.408    -.1098065    .2701983
       asian |  -.2215346   .3465136    -0.64   0.523    -.9006887    .4576195
       black |   .0795698   .1290768     0.62   0.538    -.1734162    .3325557
    hispanic |  -.4442824   .2274148    -1.95   0.051    -.8900073    .0014424
       other |   .1451782   .2324359     0.62   0.532    -.3103877    .6007441
     unknown |  -.0383833   .2572204    -0.15   0.881     -.542526    .4657595
        ageX |  -.7047827    .073647    -9.57   0.000    -.8491282   -.5604372
        pell |   .9411883   .1118043     8.42   0.000     .7220558    1.160321
       ftiac |   .4617117   .1131325     4.08   0.000      .239976    .6834473
      semgpa |    .624281   .0367881    16.97   0.000     .5521777    .6963843
       _cons |  -1.597359   .3702509    -4.31   0.000    -2.323037   -.8716805
------------------------------------------------------------------------------
```

```
212 .
    end of do-file

213 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

214 . logit $outcome2 $cov1 $control, robust

    Iteration 0:   log pseudolikelihood = -1738.7628
    Iteration 1:   log pseudolikelihood = -1637.9586
    Iteration 2:   log pseudolikelihood = -1633.8147
    Iteration 3:   log pseudolikelihood = -1633.7853
    Iteration 4:   log pseudolikelihood = -1633.7853

    Logistic regression                             Number of obs     =      3,010
                                                    Wald chi2(13)     =     160.38
                                                    Prob > chi2       =     0.0000
    Log pseudolikelihood = -1633.7853               Pseudo R2         =     0.0604

------------------------------------------------------------------------------
             |               Robust
  summenl_new|      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
   pass_math |    .4513728   .2731655     1.65   0.098    -.0840218    .9867674
   pass_read |    .5811801   .3243331     1.79   0.073    -.0545011    1.216861
  pass_write |     .527236   .2725017     1.93   0.053    -.0068575     1.06133
      female |   -.1283525   .0864619    -1.48   0.138    -.2978147    .0411096
       asian |     .191124   .2454331     0.78   0.436     -.289916    .6721641
       black |    .2418237   .1217892     1.99   0.047     .0031213     .480526
    hispanic |   -.0883131   .2360136    -0.37   0.708    -.5508913    .3742652
       other |    .5711436    .190595     3.00   0.003     .1975843    .9447029
     unknown |    .2316617    .228484     1.01   0.311    -.2161587    .6794822
        ageX |    .0536145   .0631934     0.85   0.396    -.0702422    .1774712
        pell |    .3876869   .0904336     4.29   0.000     .2104402    .5649335
       ftiac |     .104352   .1022957     1.02   0.308    -.0961438    .3048479
      semgpa |    .3794223   .0397022     9.56   0.000     .3016075    .4572371
       _cons |   -3.778205   .4644469    -8.13   0.000    -4.688504   -2.867906
------------------------------------------------------------------------------

215 .
    end of do-file

216 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

217 . mlogit $outcome $cov2 $control, baseoutcome(1)

    Iteration 0:   log likelihood = -3140.8954
    Iteration 1:   log likelihood = -2739.0124
    Iteration 2:   log likelihood = -2695.6766
    Iteration 3:   log likelihood = -2693.9833
    Iteration 4:   log likelihood = -2693.9818
    Iteration 5:   log likelihood = -2693.9818

    Multinomial logistic regression                 Number of obs     =      3,010
                                                    LR chi2(33)       =     893.83
                                                    Prob > chi2       =     0.0000
    Log likelihood = -2693.9818                     Pseudo R2         =     0.1423
```

deg	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	(base outcome)					
2						
semcrattX	-.1985759	.0965856	-2.06	0.040	-.3878801	-.0092717
female	-.9035153	.1308827	-6.90	0.000	-1.160041	-.6469899
asian	.2797235	.3353356	0.83	0.404	-.3775222	.9369692
black	.0114203	.1750624	0.07	0.948	-.3316956	.3545363
hispanic	.146389	.3301315	0.44	0.657	-.500657	.7934349
other	-.2062898	.3194953	-0.65	0.518	-.832489	.4199094
unknown	-.0597962	.337663	-0.18	0.859	-.7216034	.6020111
ageX	.032817	.0917552	0.36	0.721	-.14702	.2126539
pell	-.0200835	.1359902	-0.15	0.883	-.2866194	.2464523
ftiac	.2109598	.1464335	1.44	0.150	-.0760447	.4979642
semgpa	.624394	.0576785	10.83	0.000	.5113461	.7374418
_cons	-1.893031	.4150123	-4.56	0.000	-2.70644	-1.079622
3						
semcrattX	.4907308	.1019203	4.81	0.000	.2909708	.6904909
female	-.2590983	.1310786	-1.98	0.048	-.5160076	-.002189
asian	-.3594359	.4943274	-0.73	0.467	-1.3283	.6094281
black	-.7005057	.2274417	-3.08	0.002	-1.146283	-.2547281
hispanic	-.4095063	.3978543	-1.03	0.303	-1.189286	.3702737
other	.0926467	.289622	0.32	0.749	-.475002	.6602953
unknown	.1773713	.3265814	0.54	0.587	-.4627165	.817459
ageX	-.2476818	.1049657	-2.36	0.018	-.4534108	-.0419527
pell	-.001579	.140473	-0.01	0.991	-.2769011	.2737431
ftiac	-.0608968	.1633062	-0.37	0.709	-.380971	.2591774
semgpa	.7337726	.0707325	10.37	0.000	.5951394	.8724058
_cons	-3.956296	.4715538	-8.39	0.000	-4.880525	-3.032068
4						
semcrattX	.6186605	.0931525	6.64	0.000	.4360851	.8012359
female	-.3916418	.1209255	-3.24	0.001	-.6286514	-.1546321
asian	.885112	.3246534	2.73	0.006	.248803	1.521421
black	-.6397625	.2223672	-2.88	0.004	-1.075594	-.2039308
hispanic	.0978807	.304168	0.32	0.748	-.4982776	.694039
other	-.0333134	.2922009	-0.11	0.909	-.6060167	.5393899
unknown	.1340424	.3125522	0.43	0.668	-.4785487	.7466335
ageX	-.780033	.1103391	-7.07	0.000	-.9962937	-.5637723
pell	-.5047328	.1342018	-3.76	0.000	-.7677634	-.2417022
ftiac	-.5211683	.1603499	-3.25	0.001	-.8354484	-.2068882
semgpa	1.008466	.0783015	12.88	0.000	.8549978	1.161934
_cons	-3.349726	.4722429	-7.09	0.000	-4.275305	-2.424147

218 .
end of do-file

219 . tab semcrattX

RECODE of semcratt (SemCrAtt)	Freq.	Percent	Cum.
1	536	17.81	17.81
2	1,556	51.69	69.50
3	918	30.50	100.00
Total	3,010	100.00	

```
220 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

221 .
222 . global cov2 "i.semcrattX"

223 .
end of do-file

224 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

225 . mlogit $outcome $cov2 $control, baseoutcome(1)

Iteration 0:   log likelihood = -3140.8954
Iteration 1:   log likelihood = -2735.1378
Iteration 2:   log likelihood = -2689.3629
Iteration 3:   log likelihood =  -2687.496
Iteration 4:   log likelihood = -2687.4945
Iteration 5:   log likelihood = -2687.4945

Multinomial logistic regression                 Number of obs     =      3,010
                                                LR chi2(36)       =     906.80
                                                Prob > chi2       =     0.0000
Log likelihood = -2687.4945                     Pseudo R2         =     0.1444
```

deg	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	(base outcome)					
2						
semcrattX						
2	-.3180837	.1606703	-1.98	0.048	-.6329917	-.0031756
3	-.4059583	.1911646	-2.12	0.034	-.780634	-.0312826
female	-.9058884	.1309732	-6.92	0.000	-1.162591	-.6491856
asian	.2746907	.3358109	0.82	0.413	-.3834866	.9328679
black	.0199489	.1753812	0.11	0.909	-.3237919	.3636896
hispanic	.1395878	.3302255	0.42	0.673	-.5076422	.7868178
other	-.2010702	.319439	-0.63	0.529	-.8271592	.4250189
unknown	-.060126	.3380671	-0.18	0.859	-.7227253	.6024733
ageX	.0243833	.0922594	0.26	0.792	-.1564417	.2052084
pell	-.0034204	.1372858	-0.02	0.980	-.2724957	.2656549
ftiac	.2064409	.1466109	1.41	0.159	-.0809112	.493793
semgpa	.6211103	.0576506	10.77	0.000	.5081173	.7341033
_cons	-2.003906	.3839316	-5.22	0.000	-2.756398	-1.251414
3						
semcrattX						
2	.9388208	.2350009	3.99	0.000	.4782275	1.399414
3	1.243452	.2473509	5.03	0.000	.7586528	1.72825
female	-.2548358	.1311633	-1.94	0.052	-.5119111	.0022396
asian	-.3435142	.4950474	-0.69	0.488	-1.313789	.626761
black	-.7173276	.2273981	-3.15	0.002	-1.16302	-.2716356
hispanic	-.4002424	.3976109	-1.01	0.314	-1.179545	.3790606
other	.0780001	.2899634	0.27	0.788	-.4903177	.6463179
unknown	.1685644	.3270709	0.52	0.606	-.4724828	.8096116
ageX	-.2289904	.1051994	-2.18	0.030	-.4351774	-.0228034
pell	-.0386858	.1409502	-0.27	0.784	-.3149431	.2375715
ftiac	-.0501757	.1633841	-0.31	0.759	-.3704026	.2700512
semgpa	.7454217	.0713914	10.44	0.000	.6054972	.8853462
_cons	-3.858165	.4643694	-8.31	0.000	-4.768312	-2.948017
4						
semcrattX						
2	.234761	.1882876	1.25	0.212	-.134276	.603798
3	1.054412	.1943217	5.43	0.000	.6735485	1.435276

female	-.3996202	.1211957	-3.30	0.001	-.6371593	-.162081
asian	.8723367	.3247021	2.69	0.007	.2359323	1.508741
black	-.6149328	.2230002	-2.76	0.006	-1.052005	-.1778603
hispanic	.0906786	.3047582	0.30	0.766	-.5066366	.6879937
other	-.0138108	.2924926	-0.05	0.962	-.5870858	.5594642
unknown	.1409951	.3125641	0.45	0.652	-.4716192	.7536095
ageX	-.8006246	.1110624	-7.21	0.000	-1.018303	-.5829464
pell	-.4767649	.1355957	-3.52	0.000	-.7425276	-.2110022
ftiac	-.5335549	.1608256	-3.32	0.001	-.8487673	-.2183425
semgpa	.994512	.0782101	12.72	0.000	.841223	1.147801
_cons	-2.39875	.449588	-5.34	0.000	-3.279926	-1.517573

```
226 .
    end of do-file

227 . tab fyrcollcreditX
```

RECODE of fyrcollcredit (FYrCollCredit)	Freq.	Percent	Cum.
1	1,242	41.26	41.26
2	960	31.89	73.16
3	808	26.84	100.00
Total	3,010	100.00	

```
228 . tab engcollpass
```

EngCollPass	Freq.	Percent	Cum.
0	319	10.60	10.60
1	2,691	89.40	100.00
Total	3,010	100.00	

```
229 . tab mathcollpass
```

MathCollPass	Freq.	Percent	Cum.
0	183	6.08	6.08
1	2,827	93.92	100.00
Total	3,010	100.00	

```
230 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

231 . mlogit $outcome $cov3 $control, baseoutcome(1)

    Iteration 0:   log likelihood = -3140.8954
    Iteration 1:   log likelihood = -2703.6385
    Iteration 2:   log likelihood = -2652.9946
    Iteration 3:   log likelihood = -2651.0371
    Iteration 4:   log likelihood = -2651.0335
    Iteration 5:   log likelihood = -2651.0335

    Multinomial logistic regression                 Number of obs     =      3,010
                                                    LR chi2(33)       =     979.72
                                                    Prob > chi2       =     0.0000
    Log likelihood = -2651.0335                     Pseudo R2         =     0.1560
```

deg	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	(base outcome)					
2						
fyrcollcreditX	.145177	.0811869	1.79	0.074	-.0139464	.3043004
female	-.9411216	.1308097	-7.19	0.000	-1.197504	-.6847393
asian	.3195894	.3321966	0.96	0.336	-.3315039	.9706828
black	.0193992	.1747924	0.11	0.912	-.3231875	.361986
hispanic	.1298381	.3317046	0.39	0.695	-.520291	.7799671
other	-.2197802	.3199639	-0.69	0.492	-.8468979	.4073375
unknown	-.0356199	.3373663	-0.11	0.916	-.6968457	.6256058
ageX	.1158642	.0897129	1.29	0.197	-.0599699	.2916983
pell	-.1521805	.1351614	-1.13	0.260	-.417092	.1127309
ftiac	.2241406	.1456125	1.54	0.124	-.0612546	.5095358
semgpa	.6129305	.0589382	10.40	0.000	.4974138	.7284472
_cons	-2.583283	.3752328	-6.88	0.000	-3.318726	-1.84784
3						
fyrcollcreditX	.7122031	.0859739	8.28	0.000	.5436973	.8807088
female	-.3023555	.1326024	-2.28	0.023	-.5622515	-.0424594
asian	-.3526476	.4944045	-0.71	0.476	-1.321663	.6163673
black	-.7625889	.2291726	-3.33	0.001	-1.211759	-.313419
hispanic	-.3999393	.4037302	-0.99	0.322	-1.191236	.3913573
other	-.0185794	.2947041	-0.06	0.950	-.5961887	.55903
unknown	.0963839	.3299554	0.29	0.770	-.5503168	.7430847
ageX	-.2123422	.1050683	-2.02	0.043	-.4182722	-.0064121
pell	-.1093107	.1427864	-0.77	0.444	-.3891668	.1705455
ftiac	-.0538905	.165031	-0.33	0.744	-.3773453	.2695642
semgpa	.6493991	.0723976	8.97	0.000	.5075023	.7912959
_cons	-4.001641	.4321748	-9.26	0.000	-4.848688	-3.154594
4						
fyrcollcreditX	.8541958	.0798687	10.69	0.000	.6976559	1.010736
female	-.4575942	.1235755	-3.70	0.000	-.6997976	-.2153907
asian	.9087923	.3285021	2.77	0.006	.26494	1.552645
black	-.7017909	.2250021	-3.12	0.002	-1.142787	-.2607949
hispanic	.0669369	.3158242	0.21	0.832	-.5520671	.6859409
other	-.1771255	.2992862	-0.59	0.554	-.7637156	.4094647
unknown	.0266483	.3178185	0.08	0.933	-.5962646	.6495611
ageX	-.7427951	.1109524	-6.69	0.000	-.9602578	-.5253324
pell	-.6118548	.1372132	-4.46	0.000	-.8807879	-.3429218
ftiac	-.5273031	.1629067	-3.24	0.001	-.8465943	-.2080119
semgpa	.9203526	.0800345	11.50	0.000	.7634879	1.077217
_cons	-3.368314	.438273	-7.69	0.000	-4.227314	-2.509315

```
232 .
    end of do-file

233 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

234 .
235 . global cov3 "i.fyrcollcreditX"
```

```
236 .
    end of do-file

237 . do "C:\Users\JACOB-~1\AppData\Local\Temp\STD03000000.tmp"

238 . mlogit $outcome $cov3 $control, baseoutcome(1)

    Iteration 0:   log likelihood = -3140.8954
    Iteration 1:   log likelihood = -2694.8673
    Iteration 2:   log likelihood = -2636.4334
    Iteration 3:   log likelihood = -2634.6003
    Iteration 4:   log likelihood = -2634.5933
    Iteration 5:   log likelihood = -2634.5933

    Multinomial logistic regression                 Number of obs     =      3,010
                                                    LR chi2(36)       =    1012.60
                                                    Prob > chi2       =     0.0000
    Log likelihood = -2634.5933                     Pseudo R2         =     0.1612
```

deg	Coef.	Std. Err.	z	P>|z|	[95% Conf.	Interval]
1	(base outcome)					
2						
fyrcollcreditX						
2	.3729705	.1446888	2.58	0.010	.0893857	.6565554
3	.2502209	.1694688	1.48	0.140	-.0819318	.5823736
female	-.9377997	.1308627	-7.17	0.000	-1.194286	-.6813134
asian	.3227755	.3322712	0.97	0.331	-.3284642	.9740152
black	.0203259	.175031	0.12	0.908	-.3227285	.3633803
hispanic	.1481912	.3318938	0.45	0.655	-.5023088	.7986911
other	-.2002178	.3204467	-0.62	0.532	-.8282817	.4278462
unknown	-.0366528	.3371777	-0.11	0.913	-.6975089	.6242034
ageX	.1312804	.0903023	1.45	0.146	-.0457088	.3082697
pell	-.1692632	.135522	-1.25	0.212	-.4348814	.096355
ftiac	.2266616	.1456188	1.56	0.120	-.058746	.5120692
semgpa	.6174719	.0593697	10.40	0.000	.5011093	.7338345
_cons	-2.555649	.3610868	-7.08	0.000	-3.263366	-1.847932
3						
fyrcollcreditX						
2	1.018144	.1797216	5.67	0.000	.6658961	1.370392
3	1.51562	.1832629	8.27	0.000	1.156431	1.874808
female	-.2964887	.1326468	-2.24	0.025	-.5564716	-.0365058
asian	-.3496845	.4947239	-0.71	0.480	-1.319326	.6199565
black	-.7651966	.229221	-3.34	0.001	-1.214462	-.3159316
hispanic	-.3842996	.4035896	-0.95	0.341	-1.175321	.4067216
other	-.0030427	.2948298	-0.01	0.992	-.5808985	.574813
unknown	.0890564	.329858	0.27	0.787	-.5574534	.7355662
ageX	-.1981942	.1055658	-1.88	0.060	-.4050993	.0087109
pell	-.1266196	.1430805	-0.88	0.376	-.4070522	.1538131
ftiac	-.0494554	.1649331	-0.30	0.764	-.3727183	.2738075
semgpa	.6564484	.0731905	8.97	0.000	.5129976	.7998992
_cons	-3.490571	.4222947	-8.27	0.000	-4.318253	-2.662888
4						
fyrcollcreditX						
2	.1845072	.1692284	1.09	0.276	-.1471745	.5161888
3	1.554964	.1533707	10.14	0.000	1.254362	1.855565
female	-.4729758	.1243914	-3.80	0.000	-.7167784	-.2291731
asian	.8856402	.3297877	2.69	0.007	.2392683	1.532012
black	-.7071024	.2262906	-3.12	0.002	-1.150624	-.263581
hispanic	.0266486	.3183853	0.08	0.933	-.5973752	.6506723

other	-.2257322	.3011266	-0.75	0.453	-.8159296	.3644652
unknown	.031318	.3195614	0.10	0.922	-.5950108	.6576468
ageX	-.770178	.1114695	-6.91	0.000	-.9886542	-.5517017
pell	-.590727	.1384864	-4.27	0.000	-.8621554	-.3192986
ftiac	-.5445179	.1644237	-3.31	0.001	-.8667824	-.2222535
semgpa	.8864969	.0791005	11.21	0.000	.7314627	1.041531
_cons	-2.072063	.4209254	-4.92	0.000	-2.897062	-1.247064

```
239 .
    end of do-file

240 .
```