

# Using SPSS, Access, and Excel for CBM004 Reports

**TAIR 2015 – Session G5**  
**Presented by Jane Haas**  
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## Step 1:

Import raw data from certified  
CBM004 text file into SPSS

\* **Read the text data file from the Coordinating Board.**

\* **Replace the path below** R:\IRE-Limited\CBM Files\Downloaded Raw Data Files\CBM 04\YearFolder\File name.txt

**data list file='R:\IRE-Limited\CBM Files\Downloaded Raw Data Files\CBM 04\FA2013\04\_12013.txt' fixed**  
**records=1**

```
/1  prefix          8-14 (a)
    crsnum         15-21(a)
    sect           22-28 (a)
    sch            29-32 (2)
    devex          33-34
    instype        35
    crstype       36
    loccode        37 (a)
    cnthrs         38-41
    cip            42-51 (a)
    instmode      52
    zip            53-57
    fac id         58-66 (a)
    resp           67-69
    weeks         70-71
    ugnaf          72-74
    sem            75|
    yr             76-79
    instfice      80-85
    ugaf           86-88
    ugnsf          89-91
```

.  
**EXECUTE.**

## VARIABLE LABELS

<u>prefix</u>	'Subject Prefix'
<u>crsnum</u>	'Course Number'
<u>sect</u>	'Section Number'
<u>sch</u>	'Semester Hour Value'
<u>devex</u>	'Dev Enrollment Exceeds State Limit'
<u>instype</u>	'Instructional Type'
<u>crstype</u>	'Course Type'
<u>loccode</u>	'Location Code'
<u>cnthrs</u>	'Contact Hours'
<u>cip</u>	'Approval Code CIP'
<u>instmode</u>	'Instructor Mode'
<u>zip</u>	'Zip or Country Code'
<u>fac_id</u>	'Instructor Code'
<u>resp</u>	'Responsibility Factor'
<u>weeks</u>	'Number of Weeks'
<u>ugnaf</u>	'Enrollment NOT affected by UG SCH limit'
<u>sem</u>	'Semester'
<u>yr</u>	'Year'
<u>instfice</u>	'Inter-institutional FICE'
<u>ugaf</u>	'Enrollment affected by UG SCH limit'
<u>ugnsf</u>	'Enrollment not state-funded'.

## VALUE LABELS

instype 1 'Lecture' 2 'Lab' 3 'Clinical' 4 'Electronic' 5 'Co-op' 6 'Internship' 7 'Practicum' /  
crstype 1 'General Academic' 2 'Regular Technical' 4 'Technical (Workforce) /  
loccode '1' 'In-District' '2' 'Out-of-District' '3' 'Out-of-State' '4' 'Foreign Country'  
'5' 'Correctional Institution' '6' 'Inter-Institutional' '7' 'Military Bases'  
'8' 'Primary or Secondary School' '9' 'Individual Telecommunications'  
'A' 'Auxiliary Location' 'B' 'Out-of-District Entity' 'H' 'High School for Dual Credit' /  
instmode 1 'Face to Face' 2 'Internet' 3 'Video Tape/TV' 4 'Interactive Video'  
5 'Multiple or Other Electronic Media' 6 'Hybrid' /  
sem 1 'Fall' 2 'Spring' 3 'Summer I' 4 'Summer II' /.

**EXECUTE.**

*\* Look for duplicate courses to identify potential problems or team-teaching:*

```
COMPUTE dup=0.
```

```
SORT CASES BY
```

```
  prefix crsnum sect (A) .
```

```
IF (prefix=lag(prefix)) and (crsnum=lag(crsnum)) and (sect=lag(sect)) dup=1.
```

```
FREQUENCIES
```

```
  VARIABLES=dup
```

```
  /ORDER ANALYSIS .
```

```
EXECUTE.
```

*\* If the responsibility factor is off by a decimal point, correct:*

```
COMPUTE resp=resp*10.
```

*\* If the instructor ID is invalid ("Staff"), change to "999999999":*

```
IF (fac_id="Staff") fac_id="999999999".
```

```
EXECUTE .
```

\*\*\*\*\*

*\* If the data file looks clean you should save it at this point as "04\_12013.sav" (04\_#YEAR is Access name)  
\* Import to Access database.*

\*Note: Prior to Fall 2013 SCH value was single digit (eg. 3), now it has 2 decimals, so in the CBM flat file it will be "300"  
\*Current syntax will import text to SPSS as "3.00" (with decimals), however Access will import text as "300" (without decimals)  
\*Before adding semester table to main "cbm004" database, remember to divide 300 by 100 and format field to have decimals

|  
\*\*\*\*\*

**Formulas:**

**Enroll** = ugnaf 'Enrollment NOT affected' + devex 'Dev Enrollment Exceeds State Limit' +  
ugaf 'Enrollment affected by UG SCH limit' + ugnsf 'Enrollment not state-funded'.

**Total CH** = enroll \* cnthrs 'Contact Hours'

**Funded CH** = (ugnaf 'Enrollment NOT affected' + ugaf 'Enrollment affected by UG SCH limit') \* cnthrs

**Excess Developmental CH** = devex 'Dev Enrollment Exceeds State Limit' \* cnthrs

**3-peat CH** = ugnsf 'Enrollment not state-funded' \* cnthrs

\*Since there are formulas for TOTALS in Access, this can be done after importing to have totals in SPSS file

\*Compute TOTAL Enrollment, Contact Hours and Total Semester Credit Hours:

\*1) First compute TOTAL Enrollment.

```
COMPUTE enroll=0.  
COMPUTE enroll=devex+ugnaf+ugaf+ugnsf.  
EXECUTE.
```

|

\*Check if enrollment adds up.

```
DESCRIPTIVES VARIABLES=devex ugnaf ugaf ugnsf enroll  
/STATISTICS=SUM.
```

\* 2) Compute Total SCH.

```
COMPUTE TotalSCH=0.  
COMPUTE TotalSCH=enroll*sch.  
EXECUTE.
```

\*Check if SCH total matches CBM certified edit.

```
DESCRIPTIVES VARIABLES=TotalSCH  
/STATISTICS=SUM.
```

\*\*\*\*\*

**\* 3) Compute Total CH:**

**\* A) Compute Total Funded CH.**

COMPUTE CHfund=0.

COMPUTE CHfund=(ugnaf+ugaf)\*cnthrs.

EXECUTE.

**\* B) Compute Total Excess Developmental CH .**

COMPUTE CHdevex=0.

COMPUTE CHdevex=devex\*cnthrs.

EXECUTE.

**\* C) Compute Total 3-peat CH.**

COMPUTE CHnsf=0.

COMPUTE CHnsf=ugnsf\*cnthrs.

EXECUTE.

**\* D) Add all CH (funded+developmental+3peat).**

COMPUTE TotalCH=0.

COMPUTE TotalCH=(CHfund+CHdevex+CHnsf).

EXECUTE.



**\*Check totals.**

```
DESCRIPTIVES VARIABLES=CHfund CHdevex CHnsf TotalCH  
/STATISTICS=SUM.
```

**\* Or just do "Enroll \* CH".**

```
COMPUTE TotalCH=0.  
COMPUTE TotalCH=enroll*cnthrs.  
EXECUTE.
```

**\*Check if CH total matches CBM certified edit.**

```
DESCRIPTIVES VARIABLES=TotalCH  
/STATISTICS=SUM.
```

**\*\*\*END of Syntax**

## Step 2:

Run queries in Access

- 1) Calculate Totals
- 2) Assign Faculty (Status, Name)

## Step 3:

### Export Access Data File to Excel

- 1) Make Adjustments (see “Notes”)
- 2) Subtotal by Div/Dept/Discipline
- 3) Copy Special Sections to own tab
- 4) Do Pivot Tables

1	<b>Transforming "qryCBM004CHbyDivDeptSection_TERM" into "CBM004 TERM Final"</b>
2	<b>MSCI</b>
3	Add Military Science. <b>MANUALLY. In red.</b> Get data extracted from Colleague (CSAR to find courses, CRSE-Cour
4	
5	<b>Sections Count</b>
6	1) Need to adjust for '% responsibility" ( <b>Cnt=1*Resp/100</b> )
7	2) Need to do stacked classes. <b>MANUALLY.</b> Make a note which class it was stacked with
11	
12	<b>SCH &amp; Enrollment Adjustment</b>
13	1) <b>Adjusted Enrollment=Enroll*%Responsibility</b>
21	3) Calculate " <b>Total SCH</b> " =Adj. Enr*SCH Value
22	
23	<b>Section code Look-up</b>

33 **Insert/arrange columns in this order, so when copy data for multiple semesters everything will line up:**

34										condit					
35	CBM004CHbyDivDeptSection	combines makes "Course Section							qry	format			inserted*	replaced	inserted*
36	<b>A</b>	<b>B</b>	<b>C</b>	<b>D</b>	<b>E</b>	<b>F</b>	<b>G</b>	<b>H</b>	<b>I</b>	<b>J</b>	<b>K</b>	<b>L</b>	<b>M</b>	<b>N</b>	
37	Div	Dept	Discipline	prefix	crsnum	sect	FE	Course Section	Type	Resp	Enroll	Adj Enr	SCH value	Total SCH	
38	BPT	NRED	Registere	RNSG	1300	090		RNSG 130	LEC	50	63	=K36*J36/100	3.0	=L36*M36	
39	BPT	NRED	Registere	RNSG	1300	090		RNSG 130	LEC	50	63	31.5	3.0	94.5	
40										<100					
41								Added afer CBM extraction with separate qry				inserted*	inserted		
42	<b>O</b>	<b>P</b>	<b>Q</b>	<b>R</b>	<b>S</b>	<b>T</b>	<b>U</b>	<b>V</b>	<b>W</b>	<b>X</b>	<b>Y</b>	<b>Z</b>	<b>AA</b>	<b>AB</b>	
43	CH	Wks	Funded CH	Excess Dev CH	3peat CH	Total CH	Faculty ID	fac_id ID	PERSTAT_HRP_ID	Fac_ Name	Status	POS_ TITLE	Cnt	Note	
44	48	16	3024	0	0	3,024				Dawod, :	FT	INSTRUCTOR, N	=1*J36/100	stacked &	
45	48	16	3024	0	0	3,024				Pellegrin	FT	INSTRUCTOR, N	0.50	other notes	
46														cond format <1	
47	<b>Add the following sheets to "qryCBM004CHbyDivDeptSectionTERM" so everything is in one file:</b>														
48	Note: If you make any changes in this main data sheet, copy the change to "subtotals" sheet! If change affects "Special sections" or "Avg Class size" then copy there as well.														
49	subtotals	qryCBM004CHbyDivDeptSectionFA12	SpecialSections	SpecialPV	AvgClassSz	excluded	Full-partSCH	PRenroll	notes						

# Adjustment for Team-taught and Stacked Classes:

1	Div	Dept	Discipline	prefix	crsnu m	sect	Type	Resp	Enro ll	Adj Enr	SCH value	Total SCH	Total CH	Fac_Name	Statu s	Cnt	Note
31	AS	ARTS	Art	ARTS	2356	151	LEC	100	9	9.0	3.0	27.0	864	Byers, Diana	FT	0.5	stacked w/ 2357.150
32	AS	ARTS	Art	ARTS	2356	500	LEC	100	12	12.0	3.0	36.0	1,152	Janko, Jeffrey	PT	1.0	
33	AS	ARTS	Art	ARTS	2357	150	LEC	100	5	5.0	3.0	15.0	480	Byers, Diana	FT	0.5	stacked w/ 2356.151

1598	BPT	NRED	Health Science	HPRS	1204	571	LEC	50	16	8.0	2.0	16.0	512	Jimenez, Benjamin	PT	0.5	Team-taught
1599	BPT	NRED	Health Science	HPRS	1204	571	LEC	50	16	8.0	2.0	16.0	512	Asuncion, Louie	FT	0.5	
1600	BPT	NRED	Health Science	HPRS	1204	709	LEC	100	21	21.0	2.0	42.0	1,344	Fanger, Robert	FT	1.0	
1601	BPT	NRED	Health Science	HPRS	1204	710	LEC	100	14	14.0	2.0	28.0	896	Asuncion, Louie	FT	1.0	
1602	BPT	NRED	Health Science	HPRS	1204	800	LEC	33	19	6.3	2.0	12.5	399	Vela, Bernadette	PT	0.33	Team-taught
1603	BPT	NRED	Health Science	HPRS	1204	800	LEC	33	19	6.3	2.0	12.5	399	Jimenez, Benjamin	PT	0.33	
1604	BPT	NRED	Health Science	HPRS	1204	800	LEC	34	19	6.5	2.0	12.9	418	Asuncion, Louie	FT	0.34	
1605	BPT	NRED	Health Science	HPRS	1206	090	LEC	100	23	23.0	2.0	46.0	736	Black, Chris	FT	1.0	

# Subtotals and Checking:

	1	Div	Dept	Discipline	prefix	crsnum	sect	Adj Enr	Total SCH	Total CH	Cnt	Note
	1078	AS Total						19,553.0	57,500.0	1,108,976	998.0	
+	1087			Health Information Technology Total				98.0	282.0	6,032	8.0	
+	1096			Medical Laboratory Technology Total				93.0	265.0	11,648	7.0	
+	1106			Occupational Therapy Assistant Total				121.0	363.0	13,056	6.0	
+	1113			Pharmacy Technology Total				25.0	70.0	2,960	5.0	
+	1125			Physical Therapist Assistant Total				121.0	368.0	13,232	6.0	
+	1139			Respiratory Therapy Total				84.0	201.0	9,360	5.0	
+	1147			Surgical Technology Total				24.0	96.0	5,568	2.0	
-	1148	ALHE Total						566.0	1,645.0	61,856	39.0	
-	1293	BUSI Total						1,963.0	5,821.0	111,904	126.0	
-	1405	COMS Total						1,357.0	4,288.0	117,312	93.0	
-	1502	DEHE Total						591.0	1,721.0	66,032	40.0	
-	1597	HUMS Total						1,203.0	3,699.0	104,528	85.0	
-	1664	IEDU Total						674.0	2,350.0	59,200	60.0	
-	1761	NRED Total						1,012.0	2,260.0	85,008	39.0	
-	1826	PUBS Total						1,193.0	3,932.0	100,224	53.0	
-	1942	TECH Total						1,144.0	3,935.0	112,608	96.0	
	1943	BPT Total						9,703.0	29,651.0	818,672	631.0	
	1944	Grand Total						29,256.0	87,151.0	1,927,648	1629.0	
	1945								87,143	1,927,520		CBM edit summary
	1946								8	128		add MSCI
	1947								87,151	1,927,648		Grand Total
	1948								0	0		Difference



# Thank You!

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