

Submitted: August 8, 2007 (revised November 21, 2007)

Approved: December 4, 2007

**Recommendation #20: Process for assigning undergraduate student credit hours to an academic department for the purpose of distributing the student credit hour (SCH) tuition pool**

**Issue number: T-03, T-16, T-27, T-41**

***Background***

The Budget Model Review and Implementation Committee recommended that 75 percent of net undergraduate student tuition be pooled (SCH tuition pool) and distributed to colleges based on the student credit hours (SCH) taught by each college. The distribution will be based on the college's proportion of total student credit hours and will reflect an average revenue per student credit hour, regardless of the residency. The total pool available for SCH will depend on the mix of resident and non-resident students as well as the mix of part-time and full-time students.

The Budget Model Review and Implementation Committee recommended using the Office of Institutional Research SCH data for the distribution of the SCH tuition pool. The Office of the Institutional Research captures a term's student credit hour data using an "effective date" as of the 10<sup>th</sup> day of the term. This data is captured on, or around the 30th day of class to allow for course adds and drops.

The Office of Institutional Research methodology for assigning student credit hours to academic departments is used for institutional reporting purposes. This methodology is as follows:

1. Define the primary offering department for the course
2. Assign student credit hours to each instructor proportional to each instructor's contributions to the class
3. Identify the general fund payroll commitment for each instructor
4. Assign the SCH to a department by "matching" the primary offering department and college with the instructor's payroll commitment

A detailed description of the methodology with examples can be found in Appendix 1 to this recommendation.

There are advantages to using the Institutional Research methodology. It is well-established and consistent over time, thereby providing good historical information. Processes and systems are in place to continue to replicate the method with no changes needed. As the data have been analyzed and reviewed, it is found to provide results that are reflective of the principles of the model for approximately 95% of the student credit hours.

IOWA STATE UNIVERSITY  
Resource Management Model Implementation  
Operations Team  
Tuition Revenue Work Group

There is, however, a disadvantage to using the Institutional Research methodology. For some courses that are offered in jointly administered departments or for programs for which the curriculum is shared by multiple colleges, the distribution of the students credit hours (and thus the tuition revenue) may not align with the expenses of offering the course.

Because of that disadvantage, an ad hoc committee was convened to identify possible alternative methodologies. This ad hoc committee concluded that additional capacity can be added to the existing course scheduling system that is managed by the Office of the Registrar. The capability would allow a department to input how the SCH are assigned among departments for each course (not course section) for each semester. A "primary administrative department" would have the responsibility of inputting the data. Other departments involved in the course would have read-only access to the data fields and can provide input to the primary administrative department as to how the SCH is assigned to departments.

A majority of the courses at Iowa State are taught by faculty within the primary administering department, so 100% of the SCH would go to this department on a regular basis. For courses that are taught by faculty from more than one department or by a jointly administered department, this alternative system would allow a great deal of flexibility and transparency in the SCH allocation.

It was determined that the system changes needed to implement this process can be made by early spring 2008 so that the SCH distribution data can be put into the course offering system by the department chairs for summer 2008 and fall 2008 courses. The course offering database would therefore have a complete year of SCH data for the development of the FY2010 budget.

***Recommendation***

The members of the work group recognize that the traditional practice of capturing the student credit hour data using the "matching" methodology between offering department and the instructor's payroll commitment, as described in Appendix One, has been a reasonable practice for the purpose of the Office of Institutional Research's reporting of student credit hours. However, the work group also recognizes that this practice is not an adequate methodology in the long term for distributing tuition revenue. Therefore, the work group recommends the following:

1. To develop the FY09 operating budget, the Office of Institutional Research's methodology will be used to assign student credit hours to individual Resource Responsibility Centers.
2. Prior to the development of the fiscal year 2009 budget, colleges who jointly administer an academic department will be provided the opportunity to review the existing course data and determine a fair and equitable sharing of student credit hours. The Institutional Research methodology will be "overridden" with this information to more accurately align revenue and expenses for FY09. This

IOWA STATE UNIVERSITY  
Resource Management Model Implementation  
Operations Team  
Tuition Revenue Work Group

- override will allow for a more accurate calculation of the Resource Management Fund for the colleges in FY09.
3. The necessary system programming changes within the Office of the Registrar's course offering system will be made by early Spring 2008 so that departments can enter the SCH distribution data into the course offering system using the alternative methodology described above for summer 2008 and fall 2008 courses. Department chairs and college administration will be provided with the necessary training on how to enter the distribution data when the programming changes are completed.
  4. Effective fiscal 2010 and beyond, the Office of Institutional Research SCH data will no longer be used for the purpose of distributing tuition revenue. The alternative SCH classification methodology described above would be used for the development of the FY2010 budget and actual tuition revenue distribution.

Implementing the alternative methodology for assigning student credit hours after the fiscal year 2009 base-year may have an impact on how tuition revenue is distributed to the colleges. (Keep in mind that the jointly administered departments will have been adjusted during the development of the FY09 operating, thereby establishing the Resource Management Fund more accurately.) However, additional adjustments or "recalibrations" of the base-year Resource Management Fund in fiscal year 2010 will be made to accommodate any significant changes in how tuition revenue is distributed using the two different methodologies.

To provide the information needed to recalibrate the RMF in FY2010, the work group recommends that during fiscal year 2009, the alternative methodology described above be applied off-line in a parallel process with the Office of Institutional Research methodology to quantify any difference in tuition revenue distribution between the two methodologies. University leadership can then use this information to determine if any "recalibration" is needed in fiscal year 2010 to the distribution of the Resource Management Fund.

Regardless of the methodology used for assigning student credit hours, the distribution of tuition revenue for each term will use term-specific student credit hour data. For example, the student credit hours that were generated during the Fall term will be used for the distribution of tuition that is assessed for students enrolled during the Fall term. Although student credit hours are attributed to a department, the tuition revenue will be distributed at the college-level.

## **Appendix One: Institutional Research methodology for assigning SCH**

The Office of Institutional Research methodology for assigning student credit hours to academic departments is used for institutional reporting purposes. This methodology is as follows:

1. Define the primary offering department for the course
2. Assign student credit hours to each instructor proportional to each instructor's contributions to the class
3. Identify the general fund payroll commitment for each instructor
4. Assign the SCH to a department by "matching" the primary offering department and college with the instructor's payroll commitment

### *Step 1: Define the primary offering department for the course*

Each course has only one primary offering department. The primary offering department is defined for the course based on records within the Office of the Registrar's course catalog file, which contains a record for all courses offered by the university. Generally, the department teaching the course is the primary offering department. For those courses that are cross-listed, the department that is teaching the course is generally the primary offering department and the other departments that offer the course are considered secondary offering departments.

A course offered by a department that is jointly-administered by two or more colleges will be assigned to a specific college. For example, if a course is being taught by the Department of Economics, the primary offering department for the course would be either Econ-A (College of Agriculture) or Econ-S (College of LAS).

### *Step 2: Assign student credit hours to each instructor proportional to each instructor's contributions to the class*

For each course section, there is a listing of the instructors and a percent of effort for each instructor. The instructors, and their percent of effort, can be different for each section of a course. The SCH associated with the course section are split between the instructors based on their percent of effort.

### *Step 3: Identify the payroll commitment for each instructor*

The funding source of the instructor(s) teaching the course is based on the payroll commitment of the faculty. Only General University payroll from academic departments are considered in this step. The payroll commitment for the faculty teaching a course during the Fall semester is based on the October payroll. The payroll commitment for the faculty teaching a course during the Spring and Summer semesters is based on the March payroll.

### *Step 4: Assign the SCH to a department by "matching" the primary offering department and college with the instructor's payroll commitment*

IOWA STATE UNIVERSITY  
Resource Management Model Implementation  
Operations Team  
Tuition Revenue Work Group

Assigning student credit hours associated with each instructor to an academic department involves matching the primary offering department with the instructor's payroll commitment. The matching criteria is as follows:

- A. If **any** portion of the instructor's payroll commitment is funded by the primary offering department/college through a General University Fund account<sup>1</sup>, then all of the student credit hours associated with the instructor are assigned to the primary offering department/college.
- B. If **no** portion of the instructor's payroll commitment is funded by the primary offering department/college through a General University Fund account, but **some** portion of the instructor's payroll commitment is funded by another department within the same college as the primary offering department through a General University Fund account, then all of the student credit hours associated with the instructor are assigned to the other department in the same offering college.
- C. If **no** portion of the instructor's payroll commitment is funded by the primary offering department/college through a General University Fund account **or** by another department within the same college as the primary offering department, but **some** portion is funded by a department in another college through General University Fund accounts, then all of the student credit hours associated with the instructor are assigned to the other department in the other college.
- D. If **no** portion of the instructor's payroll commitment is funded by the primary offering department/college **or** by another department within the same college as the primary offering department and **no** portion is funded through a General University Fund account from another department in another college, then all of the student credit hours associated with the instructor are assigned to the primary offering department/college.

---

<sup>1</sup> General University Fund accounts – fund accounts 704-01-00 thru 704-10-99

**Appendix 2: Hypothetical examples of assigning undergraduate student credit hours to an academic department for the purpose of distributing the SCH tuition pool**

**SIMPLE EXAMPLE**

The Principles of Agronomy (Agron 114) course is offered during the Spring semester. It is a three credit course, offered in just one section and 200 students are enrolled in this course section. According to the course record the Agronomy Department is the only offering department and the course has two instructors.

**Office of Institutional Research methodology**

The Office of Institutional Research methodology for assigning the 600 student credit hours to academic departments is as follows:

*Step 1: Define the primary offering department for the course*

The Agronomy Department is the primary offering department that is responsible for teaching the course. The Agronomy Department is not an intercollegiate department and is administered entirely by the College of Agriculture and Life Sciences. The Principles of Agronomy course is not cross-listed with any other course. Therefore, the Agronomy Department is the primary offering department.

*Step 2: Assign student credit hours to each instructor proportional to each instructor's contributions to the class*

The course generated 600 student credit hours. According to the course section record, Instructor Y's percent of effort for the course is 70% and Instructor Z's percent of effort is 30%. Therefore 420 student credit hours are assigned to Instructor Y and 180 student credit hours are assigned to Instructor Z.

*Step 3: Identify the payroll commitment for each instructor*

According to the March payroll, the payroll commitment for each instructor was as follows:

- Instructor Y: 80% of salary is funded by the Agronomy Department through General University fund accounts and 20% by the Plant Pathology Department. Both of these commitments are funded through General University fund accounts.
- Instructor Z: 80% of salary is funded by the Plant Pathology Department through General University fund accounts and 20% if funded by the Cooperative Extension Service through non-General University fund accounts.

*Step 4: Assign the SCH to a department by "matching" the primary offering department and college with the instructor's payroll commitment*

- Instructor Y: meets criteria A. A portion of Instructor Y's payroll commitment is funded by the primary offering department (Agronomy) through a General University

Fund account. Therefore, the 420 student credit hours associated with Instructor Y are assigned to the Agronomy Department and the College of Agriculture and Life Sciences.

- Instructor Z: meets criteria B. No portion of Instructor Z's payroll commitment is funded by the primary offering department (Agronomy), but a portion of Instructor Z's payroll commitment is funded by a department within the same college (Plant Pathology). Therefore, the 180 student credit hours associated with Instructor Z are assigned to the Plant Pathology Department and the College of Agriculture and Life Sciences.

### **Alternative SCH classification methodology**

The alternative SCH methodology for assigning the 600 student credit hours to academic departments is as follows:

*Step 1: Primary Administrative Department assigns the SCH to a department or departments to reflect the funding of teaching effort of the course by the departments involved and the assignment is reviewed by other departments involved in the course.*

The Primary Administrative Department is the Agronomy Department. The department chair of the Agronomy Department enters into the course offering system all of the departments that are involved in Agron 114 and the distribution split of the student credit hours generated by the course.

- It is determined that 90% of the SCH are assigned to the Agronomy Department. Therefore, 540 student credit hours are assigned to the Agronomy Department and the College of Agriculture and Life Sciences.
- It is determined that 10% of the SCH are assigned to the Plant Pathology Department. Therefore, 60 student credit hours are assigned to the Plant Pathology Department and the College of Agriculture and Life Sciences.

**COMPLEX EXAMPLE**

The Introduction to Molecular Biology Techniques (BBMB 442) course is offered during the Fall semester. It is a three credit course, offered in three section and 30 students are enrolled in each course section. The course is taught by five instructors and is cross-listed with several other courses in multiple departments in several colleges. The department records for these courses are as follows:

Course	Offering Departments	Primary Offering Department
442B	B M S	BBMB-S
442B	BBMB	BBMB-S
442B	BBC	BBMB-S
442B	EEOB-S	BBMB-S
442B	FS HN-A	BBMB-S
442B	GDCB-S	BBMB-S
442B	HORT	BBMB-S
442B	NREM	BBMB-S
442B	NUTRS	BBMB-S
442B	V MPM	BBMB-S
442B	VDPAM	BBMB-S

**Office of Institutional Research methodology**

The Office of Institutional Research methodology for assigning the 270 student credit hours to academic departments is as follows:

*Step 1: Define the primary offering department for the course*

The Biochemistry, Biophysics, and Molecular Biology (BBMB) Department is jointly administered by the College of Liberal Arts & Sciences (BBMB-S) and the College of Agriculture and Life Sciences (BBMB-A). According to the course record, BBMB-S is responsible for teaching the course and is therefore the primary offering department. All other departments that offer a cross-listed course are considered the secondary offering department.

*Step 2: Assign student credit hours to each instructor proportional to each instructor's contributions to the class*

The course generated 270 student credit hours. According to the course section record, the five instructors taught all three course sections during the Fall semester and each of the instructor's percent of effort for each course section was listed as 20%. Therefore, 54 student credit hours are assigned to each instructor.

IOWA STATE UNIVERSITY  
Resource Management Model Implementation  
Operations Team  
Tuition Revenue Work Group

*Step 3: Identify the payroll commitment for each instructor*

According to the October payroll, the payroll commitment for each instructor was as follows:

- Instructor V: 50% of salary is funded by the Biochemistry, Biophysics, and Molecular Biology Department for the College of Liberal Arts and Sciences (BBMB-S) and 50% by the Biochemistry, Biophysics, and Molecular Biology Department for the College of Agriculture and Life Sciences (BBMB-A) through General University fund accounts.
- Instructor W: 100% of salary is funded by the Chemistry Department in the LAS College through General University fund accounts.
- Instructor X: 50% of salary is funded by the Ecology, Evolution and Organismal Biology Department for the College of Liberal Arts and Sciences (EEOB-S) and 50% by the Animal Science Department within the College of Agriculture and Life Sciences through General University fund accounts.
- Instructor Y: 100% of salary is funded by the Animal Science Department in the College of Agriculture and Life Sciences through General University fund accounts.
- Instructor Z: 100% of salary is funded by the Cooperative Extension Service through non-General University Fund accounts.

*Step 4: Assign the SCH to a department by “matching” the primary offering department and college with the instructor’s payroll commitment*

- Instructor V: meets criteria A. A portion of Instructor V’s payroll commitment is funded by BBMB-S through a General University Fund account. Therefore, the 54 student credit hours associated with Instructor V are assigned to the BBMB-S Department in the LAS College.
- Instructor W: meets criteria B. No portion of Instructor W’s payroll commitment is funded by BBMB-S, but a portion of Instructor W’s payroll commitment is funded by the Chemistry Department, a department within the same college as BBMB-S. Therefore, the 54 student credit hours associated with Instructor W are assigned to the Chemistry Department in the LAS College.
- Instructor X: meets criteria B. No portion of Instructor X’s payroll commitment is funded by the BBMB-S, but a portion of Instructor X’s payroll commitment is funded by EEOB-S, a department within the same college. Therefore, the 54 student credit hours associated with Instructor X are assigned to the EEOB-S Department in the LAS College.
- Instructor Y: meets criteria C. No portion of Instructor Y’s payroll commitment is funded by BBMB-S, or by a department within the same college, but is funded by the Animal Science Department, a department in another college through a General University fund account. Therefore, the 54 student credit hours associated with Instructor Y are assigned to the Animal Science Department in the College of Agriculture and Life Sciences.
- Instructor Z: meets criteria D. No portion of Instructor Z’s payroll commitment is funded by the BBMB-S, or by a department within the same college and no portion of Instructor Z’s payroll commitment is funded through a General University fund

account in another college. Therefore, the 54 student credit hours associated with Instructor Z are assigned to the BBMB-S Department (the primary offering department) in the LAS College.

### Alternative SCH classification methodology

The alternative SCH methodology for assigning the 270 student credit hours to academic departments is as follows:

*Step 1: Primary Administrative Department assigns the SCH to a department or departments to reflect the funding of teaching effort of the course by the departments involved and the assignment is reviewed by other departments involved in the course.*

The Primary Administrative Department is the Biochemistry, Biophysics, and Molecular Biology Department. The department chair of the Biochemistry, Biophysics, and Molecular Biology Department enters into the course offering system all of the departments that are involved in BBMB 442 and the distribution split of the student credit hours generated by the course.

- It is determined that 20% of the SCH are assigned to the Biochemistry, Biophysics, and Molecular Biology Department and the College of Liberal Arts & Sciences (BBMB-S). Therefore, 54 student credit hours are assigned to the Biochemistry, Biophysics, and Molecular Biology Department and the College of Liberal Arts & Sciences (BBMB-S).
- It is determined that 20% of the SCH are assigned to the Biochemistry, Biophysics, and Molecular Biology Department and the College of Agriculture and Life Sciences (BBMB-A). Therefore, 54 student credit hours are assigned to the Biochemistry, Biophysics, and Molecular Biology Department and the College of Agriculture and Life Sciences (BBMB-A).
- It is determined that 20% of the SCH are assigned to the Ecology, Evolution, and Organismal Biology Department and the College of Liberal Arts and Sciences (EEOB-S). Therefore, 54 student credit hours are assigned to the Biochemistry, Biophysics, and Molecular Biology Department and the College of Liberal Arts and Sciences (EEOB-S).
- It is determined that 20% of the SCH are assigned to the Ecology, Evolution, and Organismal Biology Department and the College of Agriculture and Life Sciences (EEOB-A). Therefore, 54 student credit hours are assigned to the Biochemistry, Biophysics, and Molecular Biology Department and the College of Agriculture and Life Sciences (EEOB-A).
- It is determined that 10% of the SCH are assigned to the Food Science and Human Nutrition Department and the College of Agriculture and Life Sciences (FSHN-A). Therefore, 27 student credit hours are assigned to the Food Science and Human Nutrition Department and the College of Agriculture and Life Sciences (FSHN-A).

# IOWA STATE UNIVERSITY

Resource Management Model Implementation

Operations Team

Tuition Revenue Work Group

- It is determined that 10% of the SCH are assigned to the Horticulture Department. Therefore, 27 student credit hours are assigned to the Horticulture Department and the College of Agriculture and Life Sciences.