Course Management Data Mart (CMDM) Policy and Procedure Issues

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	Issue	Recommendations/Further Actions	Policy or Definition	Procedure or Data Entry	IT Tasks
1	**Course characteristics that need to be tracked. (Multiple meetings.)** The data structure in SIS reflects the complexity of the organization, and is not always conducive to easy reporting by the users. In some instances, to determine a course characteristic may require the review of several different fields in SIS. Consequently, the institution needs to identify/define those course characteristics that need to be tracked/pre-calculated and easily available to the users in the data mart. Examples: "How many independent study courses are taught? How many courses are taught off-campus? How many courses have non-standard meeting patterns? How many courses are taught via the web (course delivery mode)? For all of these questions, how do you want the statistics sorted/aggregated (i.e. by term, college, department, etc.)?	(1) The institution's administration needs to identify those course characteristics for which the pre-calculated statistics need to be easily available. The most recent draft of such suggested statistics can be found at http://www.uky.edu/IS/DataAdmin/DOCS/ware/IUUN0012-CourseManagement/CMDMHandouts/PerfMeasDimensions.pdf **Desire requested approval, decision or information by 6/27/03.** (2) Where appropriate, flags should be set in the CMDM at the course record level to indicate if a course contains a certain characteristic. Since some "higher level" course characteristics involve checking multiple SIS elements and multiple values within them, establishing a flag in the CMDM to identify the higher level characteristic will simplify user reporting.	1		**1-2** (extract logic, new data elements; operational and analytic reports),

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2	**Is there a list of courses approved for Distance Education delivery? What are the criteria, how are they published, how are they enforced, etc.? (Original issue #1 from 5/29/02.)** According to SACS, distance education is defined as "any formal education process in which the majority of the instruction occurs when the student and instructor are not in the same place." Instruction may be synchronous or asynchronous employing correspondence study, video teleconferencing, satellite technology, television, CD ROM, video or audiotape delivery, and online or web delivery techniques. The University Senate passed a resolution in 1999 clarifying the University procedures required for compliance with the Southern Association of Colleges and Schools (SACS) guidelines for substantive changes in courses and programs offered off-campus. Essentially, the paths of information flow are the same as those currently used for proposing new or changed courses or programs. The main point is the information pertinent to any new or significantly changed offering of campus courses and programs must also be reported/approved. New forms are being considered to expedite this. The Senate resolution can be found at http://www.rgs.uky.edu/gs/Senate-DL-CoursesMemo.html. The Senate Council Office disseminates a listing of the Council's actions including approved courses for	(1) Definitions for what constitutes a Distance Learning course should be reviewed and refined if necessary. **Desire requested approval, decision or information by 6/27/03.** (2) The Distance Learning Training Center should compile a list of all know Distance Education courses. (3) Upon approval of a course change for distance education delivery by the University's Senate Council, it should be coded in SIS. The nature of this coding might include some indication of the nature of the delivery format and technology, i.e. Multimedia, Interactive Television (ITV), Web based, etc. (4) Courses approved for distance education delivery should receive a 200 level section number and/or use a specific value in the Program Reporting Type, so enrollments can be reported to the CPE and other agencies. (5) It should be possible to produce a list of approved courses for distance education delivery for the use of various offices on campus. (6) A procedure should be established for the DLTC to review, waiver, or deny the delivery of courses scheduled for distance education delivery prior to Senate Council approval. (7) Data quality reports should be written and	1	2-4, 6-7	**5** (operational and analytic reports), **7** (data quality reports), **8** (extract logic and new data elements)

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	distance delivery, though an "official" aggregated list of approved courses has not been maintained. The Distance Learning Technology Center is compiling a retrospective list of approved courses and monitors the Senate Council memos for new additions.	executed to evaluate the use of delivery mode, program reporting type (RC279) and the 200 level section number to identify distance education courses in SIS and compare with the DLTC's list of such courses. (8) A flag should be set on the course record in the CMDM to indicate if a course is a Distance Learning course. Identification of a Distance Learning course involves checking multiple SIS elements and multiple values within them, so establishing a flag in the CMDM to identify this attribute will simplify user reporting. Additional flags may be required to indicate the particular type of Distance Learning course (i.e. off-campus, Internet, TV, etc.)			
3	**What should the metric be for distinguishing high and low demand course sections? (Original issue #4 from 6/05/02.)** There is no current institutional definition for a high or low demand course. Demand seems to be a function of the number of students who need the course to graduate, the number who want the course, and how frequently the course is offered. Currently, the decision to offer a course resides at the academic department or college level; however, this decision should not be predicated simply on available resources driven by "have" and "have not" units. Once the institution has a degree audit system in place, the identification of courses needed for	(1) The institution should define a metric that can be consistently applied and should reflect: enrollment demand, importance and urgency to students' meeting graduation requirements, and frequency of course offerings. We suggest the following definitions: **High Demand** - a course critical for graduation where the minimum enrollment criteria is met or for which the frequency of the course offering is limited, or those courses which have unmet enrollment demand based on the voice and web registration system logs; **Low**	1-2	4	**2-4** (extract logic, new data elements), **2-5** (operational and analytic reports)

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	graduation will be simplified. Since some courses meet multiple major requirements and this is constantly evolving, it does not seem reasonable to program the logic for every given situation. Ultimately, the system will not be able to replace the function that academic advisors perform, but should be able to focus decision making on issues related to high and low demand courses.	**Demand** – a course critical for graduation whose enrollment is below the minimum criteria but is offered frequently, or a course not critical to graduation and does not meet the minimum enrollment criteria; **Moderate Demand** – a course not critical to graduation but does meet the minimum enrollment criteria. **Desire requested approval, decision or information by 8/1/03.** (2) Due to the complexity of the issue and the volume of available data, we recommend the initial determination of course "demand" in the CMDM be based on the course demand data extracted from the voice and web registration systems, **identification of courses required for any degree from SIS data,** and the frequency of the course offering based on SIS historical data. Later refinement of the definition could include examination of the each student's degree audit data. **Initially, the high/low demand designation could be based on the historic pattern of course demand, so those courses which continue to have a significant number of students who are unable to add a course due to its closure, can be designated as "high demand". The next step could be to develop a "formula" to determine "importance or level of demand" based on historic demand noted above, in addition to the number**			

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		of students whose majors/degrees the course is required, and the number of students whose majors/degrees for which the course is not required but could apply. Later, the inclusion of the complex logic to determine how many students may still need the course can be added. Desire requested approval, decision or information by 8/1/03. (3) New elements should be added to the course records in the CMDM to indicate the frequency in which the course has been historically offered (i.e. every term, every Fall, every Spring, every Summer, every other year, etc.), if the course is required for a degree, and the demand status (high, low and moderate). (4) If the administration is interested in doing analysis on which course sections are in the most demand (i.e. Because of time of day, professor, etc.), then the unmet enrollment demand from the voice and web registration system logs should be stored on the course section record within the CMDM. (5) The metric for classifying courses, as high and low demand, should be applied campus-wide, to drive decisions on the basis of serving students rather than solely as a resource issue.			

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4	**What is the institution's definition of an Independent Study course and how are these identified in SIS? (Original issue #12 from 6/12/02 and email on 2/26/03 from J. Hager.)** The term "Independent Study" is used in two different ways when referring to courses. Courses within a major or department that might also be called "**directed study**" are identified in SIS with the "IND" activity type. The "**correspondence courses"** offered through the Office of Independent Study are identified in SIS with an "I" in the section number, and these courses do not count toward a student's full-time status, but enrollments are reported to the CPE. None of these independent study courses are on a semester basis. The following logic could be used to identify independent study courses in SIS: **(1) Course section college code equal to 'OT' OR** **(2) Course activity type code equal to 'IND' OR** **(3) Course section code equal to 'IS' OR** **(4) Course number equal to '395 ' or '396 ' '397 ' or '398 ' or '399 ' or '748' or '749' or '768' or '769' or '790' through '799' or '895' through '899' (see Note 2) OR** **(5) Course prefix/department equal to 'IES' OR** **(6) First digit of the course section number equal to 'I' (correspondence courses).** **NOTE 1:** There are also other course activity types	**(1)** The institution should be able to easily identify all independent study courses to: determine if the course requires classroom facilities, calculate costs for teaching courses using various delivery modes, help in projecting faculty workload based on the type of course, and do analysis of which courses are being offered as an independent study, by whom and why, and how our numbers of such courses compare with our benchmarks. Consequently dear definitions of what constitutes an independent study course should be consistently followed campus-wide. The definition should be viewed against the current elements in SIS used to identify such courses, and a determination made if changes in the data entry of such course data are required. **Desire requested approval, decision or information by 6/27/03.** (2) In the data mart, the calculations for determination of an independent study course should be done at the point of extraction based on the logic to the left, and a flag set on the course section record to indicate whether or not a course is an independent study. Since identification of independent study courses involves checking multiple SIS elements and multiple values within them, establishing a flag in the CMDM to identify this	1	1	**1** (data quality reports), **2** (extract logic, new data elements, operational and analytic reports)

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	(noted below) that may include some or all independent study activity. These courses normally do not have a regular meeting pattern. The "definition" of these activity types may vary from department to department and therefore, what has been identified as "PRA" in one department may be "IND" in another. They overlap considerably in use, especially since we don't have a category entitled "internship" and many departments do internships. Some departments code these as "PRA" and some as "IND". **CLI**: Clinical , **CON**: Conjoint, **COP**: Co-op, **EXP**: Experiential, **IND**: Independent Study, **PRA:** Practicum, **RES**: Research, **RSD**: Residency **NOTE 2:** The University Senate has identified specific course numbers that are reserved for certain activity types and these are: o **395**: Independent Work or Independent Study. If a department offers more than one such course, numbers lower than 395 shall be used. o **396**: Reserved for the University Experiential Education course. o **397**: ?? o **398**: ?? o **399**: Departmental field based experiential education courses. **Jacquie, are the ones below considered**	characteristic will simplify user reporting. If further delineation needs to be made for the "type" of independent study courses, then similar flags can be set for each type in which the institution is interested in reporting.			

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	independent study? o **748**: Master's Thesis Research. o **749**: Dissertation Research. o **768**: Residence credit for master's degree. o **769**: Residence credit for doctoral degree. o **790-799**: Research courses **895-899**: Independent work: professional colleges.				
5	**How are alternate delivery modes defined? (Original issue #7 from 6/12/02.)** In general the SACS standard is applicable in that "any formal education process in which the majority of the instruction occurs when the student and instructor are not in the same place" would be considered an alternate delivery mode including face-to-face instruction at an off-campus location. Instruction may be synchronous or asynchronous and employ many combinations of delivery modes. **Currently the DLTC Office indicates the type of primary delivery used for a course with the following codes: 02–Off Campus; 04–Kentucky Educational TV (KET); 05–Videotape; 06–Com-pressed Video (Video Teleconferencing or ITV); 07–Satellite; 08 – Internet; 09-Telecommunications Cable (UKTV; Insight Channel 16).**	(1) The University's definition of course delivery modes should largely accommodate the guidelines proposed by its accrediting bodies, since alternate modes of delivery tend to have implications for assuring the equivalency of academic rigor and students' access to support services. **Desire requested approval, decision or information by 8/1/03.** (2) Current delivery modes should be reviewed with new codes added for CD-ROM delivery and to reflect more accurate ratios for combinations of delivery modes (i.e. a new delivery mode code could reflect 75% face-to-face and 25% internet). Also, the need to accommodate multiple delivery modes for one course section should be a consideration in an ERP	1-4	1-4	**5** (data quality reports), **6**, (extract logic and new data elements), **7** (operational and analytic reports)

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	NOTE 1: An additional numerical code for CD-ROM delivery is needed and codes can be added to the SIS table for additional types of program delivery modes on screen 137 in SIS. It has been noted the codes in that table do not match what UK reports to Frankfort and a process of translation is conducted for reporting to the CPE. **NOTE 2:** There is currently a limitation within SIS that a course section can only have one delivery mode. The reality is that many courses are a combination of face-to-face and Internet, etc. The need to more accurately reflect the amount of time spent on alternate delivery modes is increasing.	system. **Desire requested approval, decision or information by 8/1/03.** (3) Codes used to identify delivery modes should be as consistent as possible with those used for reporting purposes. **Desire requested approval, decision or information by 8/1/03.** (4) Codes and definitions for delivery modes should be reviewed and approved by the DLTC. **Desire requested approval, decision or information by 8/1/03.** (5) Reports to evaluate the data quality of the delivery mode information should be written and reviewed, as it pertains to external reporting agency values for reporting delivery mode, as well as the relationship between delivery mode and activity types in SIS. (6) To simplify user reporting, flags should be created on the course section records to indicate delivery mode. Also, we need elements on these same records to indicate the percent of that course delivered via that delivery mode, if "hybrid" delivery modes are created as indicated in #2 above. (7) Reports on course delivery mode statistics should be written.			
6	**Definitions of various activity types, i.e. laboratory, discussion, seminar, etc. are not**	(1) The activity type definitions as have been commonly used within SIS should be	1-4	1-6	**1** (table and extract logic;

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	clear and consistently used across colleges. There are labs for physics, computer science, and engineering, but each means something different. In some cases, it may be a team or group meeting. Also, the current definitions do not address computer-assisted courses and others. (Original issue #26 from 7/24/02; #29 from 7/24/02; #32 from 7/24/02; and #35 from 8/7/02.) A Contact Hours Task Force in 1994-1995 recommended a slate of new codes to the University Senate, but no new definitions were approved. A revised list of activity type codes is attached to this document. Any text in that list highlighted in **red** is an update from the 1994-1995 list based on the information originally provided below, while text in **blue** indicates text on the 1994-1995 list that was not originally included below.	reviewed and revised by the various academic councils and the Provost. If possible, such definitions should include a relationship to appropriate delivery modes, appropriate instructor roles (see below), and ratios of class contact hours to credit hours in order to improve data quality and analysis. Special care should be taken to **not** confuse activity type with delivery mode, and to ensure activity types and delivery modes are used consistently on campus. For example, the "lecture" activity type could have multiple delivery modes including traditional, television, Internet, etc. **Desire requested approval, decision or information by 10/6/03.** (2) Consideration should be given to creating additional activity codes for: (a) online courses, (b) private instruction as in music, (c) computer assisted learning, and others that reflect changes in pedagogical approaches. **Desire requested approval, decision or information by 10/6/03.** **(3)** Courses should be coded as to the percent of each activity type contained within each course. **(Do we need this or should this be based on contact hour distribution across activity types?) Desire requested approval, decision or information by 10/6/03.** (4) Definitions should be adopted for codes that have been suggested, but not			data quality, operational and analytic reports), **5** (SIS programming changes), **6** (operational report, and SIS and/or web application programming)

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		approved. **Desire requested approval, decision or information by 10/6/03.** (5) Recommend SIS be changed to overcome what is now a default "LEC" code. (6) It is believed the review and revision of activity types should be conducted **annually,** and the data accessible through a query to the system.			
7	**What is the basis for defining "contact hours" for a course, student and faculty? How is each to be calculated? (Original issue #22 and #24 from 7/18/02; #34 from 8/7/02, 3/20/03 meeting with Connie Ray.)** Senate Council Rules do not address this matter. The basis for calculation is limited to the CPE guidelines for face-to-face instruction wherein **a credit hour is equated to 800 minutes per credit hour for lecture and 1600 minutes per credit hour for lab**. Further elaborations to these initial guidelines results in calculations of anticipated student effort, e.g., 2-3 hours of study and preparation for contact hour of class. So too is this often used in calculating distribution of effort for faculty members though pre-post class effort varies across academic units. Such definitions do not lend themselves to teaching in an online environment, though most faculty members say their effort is greater than face-to-face instruction. **"Contact Hours Definitions, Procedures and Reporting Guidelines" developed by the Contact**	**(1)** Use of course contact hours would be helpful in calculating the costs of teaching a course, and relating instructor course information in SIS to DOE in FES. **Need to address variability in faculty contact hours for courses. Desire requested approval, decision or information by 10/6/03 (or sooner if changes require programming)** (2) Accept the Contact Hours Task Force Report on credit hour and contact hour delineation. **Desire requested approval, decision or information by 10/6/03 (or sooner if changes require programming).** (3) Provost and deans should define if/how they would like to equate course contact and credit hour generation to a standardized approach to faculty percent of effort in instruction. **Desire requested approval, decision or information by 6/27/03.**	1-4	1-3	**2** (SIS programming?) **3-4** (data quality, operational and analytic reports),

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	Hours Task Force in 1994-1995. "**Contact Hours (SB109**): The number of hours per week spent by faculty in the conduct of formally scheduled courses, laboratories, and other educational activities as listed on the semester course schedule of the institution. In many cases, contact hours are equivalent to the credit hours available from the course. In other cases, the formally scheduled contact hours may be greater than the credit hours. An example occurs when a science course meets weekly for three hours of lecture and two hours of laboratory experience. While such a course might grant four credit hours, it constitutes five contact hours."	(4) Calculation of faculty contact hours (i.e. course contact hours attributed to an instructor) should be based on the percent allocation of credit hour generation on the course instructor record and the course contact hour to credit hour ratio associated with the course activity type to which the instructor is attached. For example, if an instructor has 75% credit hour allocation for a LEC activity type that has a 1:1 contact/credit hour ratio and it meets three hours a week, then the contact hours for that instructor would be (.75 credit hours) * (1contact hour/1 credit hour) * (3 contact hours/week). **Desire requested approval, decision or information by 6/27/03.**			
8	**(Currently under review by Senate Council) Departments are given only two options for activity types, LEC or LAB, and asked to give the ratio between the two on the form used to create a new course. Usually the ratio is 2 contact hours LAB to 1 hour LEC. Part of the problem is that departments are not given the categories they need to work with, and these offerings should be expanded to include Discussion, Team, Seminar, etc. (Original issue #27 from 7/24/02; related to #2 above.)** The current coding approach for activity types does not permit the institution to capture information regarding courses employing multi-methods or activities. This	**(1)** New Course and Course Change Forms should facilitate identification of the various types of activities designed into the course. **(Is the percentage not reflected by the contact hours?) Desire requested approval, decision or information by 6/27/03** (2) There needs to be adjustments for reporting purposes since codes are used to create ratios, and in turn hours that are reported on an hourly basis to CPE.	1	1-2	**1** (operational report), **2** (changes to CPE reporting jobs?)

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	information would appear to be important if capacity planning were to be implemented to support changes in instructional approaches. For example, the increased use of web-based instruction as part of the course is not currently tracked. This and other technology applications have implications for developing and scheduling "smart classrooms," acquiring and using course management system software, etc.				

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9	**Additional course and instructor information is required in SIS in order to improve data analysis, reporting and compliance with SACS requirements. (Original issue #23 from 7/18/02, 3/18/03 meeting on Teacher's Credentials data and 4/10/03 meeting with Connie Ray.)** Data in SIS does not consistently identify all those individuals associated with the instruction of a course, and lacks the ability to attach course meeting patterns and instructors to course activity types. Consequently, accurate reporting and verification of required credentials is not easy.	(1) **Course activity types** (lecture, lab, etc.) should be designated for each course meeting pattern and each course instructor in SIS. **Desire requested approval, decision or information by 6/27/03.** (2) **Percentage allocation** on the course instructor records will reflect the percent of the course credit hours and tuition that should be attributed to the individual. Consequently, a decision should be made on what/if any percent should be given to those individuals who are not involved in actual instruction, but in support roles such as a grader. **Desire requested approval, decision or information by 6/27/03.** (3) To further clarify the individual's role in a course, the **"role"** (course coordinator, primary instructor, secondary instructor, team instructor, grader, etc.) should be recorded in SIS. The definition of this role should be tied to whether someone in that role has to have the appropriate **credentials** in HRS, has to have met the **English competency** requirement, what **percentage allocation** on the SIS course instructor record for credit hour generation can/should be associated with that role, and possibly, what **SIS course activity types** and **HRS job class codes** are valid in that role. For example, should a role of "grader" be required to have the credentials, meet the English language	1-5	1-6	**1 and 3** (SIS programming), **1 and 3** (SIS programming, CMDM table) **1-6** (data quality, operational and analytic reports), **5-7** (extract logic) **6-7** (new data elements)

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		competency requirement, be given 0% allocation for credit hour generation, only be associated with a "blank" SIS course activity type, and/or only be associated with a TA job class code in HRS? **Desire requested approval, decision or information by 6/27/03.** (4) Information on all those associated with the instruction of a course should be entered in SIS to accurately reflect direct instruction and instruction support functions associated with the course. **Desire requested approval, decision or information by 6/27/03.** (5) Business rules should be defined to reflect the exact logic for checking elements in SIS and HRS to verify an instructor, TA, etc. meets the credentials requirements, how you determine who should have taken/passed the English language test, and to determine if the English language requirements have been met. **Desire requested approval, decision or information by 6/27/03.** (6) Four flags should be placed on the course instructor record in the Course Management Data Mart, to indicate if the academic credentials are required, if academic credential requirements are met, if English competency is required, and if English competency is met. (7) The "home academic unit" for a TA, GA or RA should be that department associated			

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		with the student's major in SIS. This should be extracted and stored in the CMDM.			

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10	**Missing HRS instructor assignments. (3/25/03 TA Credentials meeting.)** It is not uncommon for academic administrators and other staff to teach a course. Some of these individuals have temporary and/or part-time "instructor" assignments in HRS and get paid for the effort. Others do not have such an assignment record and get no pay. This inconsistency creates gaps in the data when we attempt to join the SIS course instructor data to the corresponding data in HRS. This is needed to do allocation of course credit and contact hours and tuition across departments, and will be required if we attempt to calculate the cost of teaching each course. In addition, there are volunteer faculty who are not employees of the University, yet are subject to the same credential requirement for teaching a class. Data on these individuals does not exist in HRS or FES.	**(1)** All individuals associated with the instruction of a course in some role in SIS, should have a corresponding "instructor" (faculty or TA) assignment in HRS in order to ensure credential requirements are met. The assignment in HRS should be active during the particular time period for the course(s), reflecting the amount the person is paid for teaching course(s). Valid "instructor" job class codes, job titles, job groups, etc. should be defined to cover all instructor positions, including volunteer faculty. In addition, the institution should decide if all graduate students associated with instruction should be identified in HRS with a TA job class code, rather than GA, RA or student positions? **Desire requested approval, decision or information by 6/27/03.** (2) For those academic administrators and other staff who teach courses "for free", as well as the non-employee volunteer faculty, the institution needs to decide how to assign a "cost of instruction" to their courses. Should these courses reflect $0 cost of instructor (based on the $0 pay on their HRS assignments), or should we develop an "average" salary or other amount to be assigned in the calculation of course instructor costs for such courses? **Desire requested approval, decision or information by 6/27/03.**	1-2	1-2	**1** (HRS table changes, data quality reports), **2** (extract logic, new data elements; operational and analytic reports), **3** (data quality, operational and analytic reports)

Course Management Data Mart (CMDM) Policy and Procedure Issues

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		(3) Reports should be written and reviewed to verify those teaching courses have the appropriate instructor assignments in HRS, to calculate total cost of instruction, the number of courses using TAs, etc.			
11	**Define regular full-time faculty (instruction, research, etc.) (Original issue #47 from 9/11/02. Related to #12 below.)**	(1) A **regular full-time faculty member** is one who has a full-time appointment in one of the title series tracks (i.e., regular, special, extension, research, or library series, etc.) and is salaried through a position that receives recurring funding. **Full-time Lecturers** teaching under a **multi-year** contract could also be counted as full-time and when computing student faculty ratios, but they are not tenure track. **Full-time temporary positions** are also used, but they are not considered regular. **Desire requested approval, decision or information by 6/27/03.** (2) Elements need to be created in the CMDM to distinguish between regular and temporary faculty, full-time and part-time faculty, tenure and non-tenured faculty, faculty title series, recurring versus non-recurring funding for faculty positions, and which of these people and positions can be used in the calculation of student to faculty ratios. These elements should be associated with the faculty position/assignment in HRS.	1	2	**2** (table, new data elements; data quality, operational and analytic reports)

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12	**Is there an official University Rule on how instructor percentages are assigned in the distribution of effort within FES, and how they are tied to the number of courses or number of course contact hours taught, or credit hours generated? (Original issue #5 from 6/05/02 and #33 from 7/31/02. Related to #6 above.)** Considerable variability exists across colleges in the determination of teaching loads and assigned percent of effort. According to **AR II-1.0-1, Page XVI-2**: the standard for teaching only refers to working assignments for **regular-title appointment** faculty members is **twelve undergraduate credit hours per semester,** or the equivalent effort in teaching-related responsibilities. The workload standard for research- or service-only assignments would be equivalent in time and effort to the teaching-only assignment. Most University faculty members will not have such singular focus assignments, but will divide their time among teaching, research, and service responsibilities. Specific guidelines for determining course contact and/or credit hour workload equivalents should be developed at the educational unit level and should recognize the variability of teaching assignments, such as class size and level; research involvement; and service responsibilities. Given the AR statements, there is no "University Rule" for assignment.	(1) The Provost and deans should develop a metric that reconciles the institution's need for evaluating productivity, and the possible variations that may exist in course pedagogies and ways of assigning faculty efforts (i.e. multiple instructors teaching course, etc.) Some more specific guidelines should be adopted that would contribute to greater standardization across campus. If such guidelines included the relationship between the number and type of courses taught, and/or credit hours generated, with the instruction percentage specified in FES, this would allow analysis of faculty instructional workload and how it relates to credit hour production, assist in more accurate calculation of course instruction costs and other similar types of analysis. **Desire requested approval, decision or information by 8/1/03.** (2) If such a metric is established, then reports should be written to evaluate the institution's progress in improving productivity based on this metric. (3) At a minimum, discussions on this metric should take place during the ERP implementation.	1, 3	1	**1** (table), **2** (data quality, operational and analytic reports)

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13	**The faculty data is not kept current in HRS, so we need to at least increase the frequency of the uploads of the faculty data and/or require the Provost's departments not using the MC Faculty Database to enter the data directly into HRS on a timely basis. (Original issue #37 from 8/8/02 and 3/20/03 meeting with Connie Ray.)** Updates to the faculty data in HRS occur either online or in batch feed from the Medical Center Faculty Database or from the files in Institutional Research. The timeliness of the updates varies. Consequently, taking snapshots of such data for the data mart will be problematic, as its accuracy will be in question.	**(1)** Ideally, faculty data entry and related data changes should be made within one system. However, this will not be possible until either the institution adopts the MC Faculty Database campus-wide, or until an ERP is implemented. **Desire requested approval, decision or information by 8/1/03.** **(2)** In the interim, data from the Institutional Research files should be uploaded into HRS **at a minimum of weekly, and before any snapshots** of such data are taken for the CMDM. **This will require all departments to more promptly process faculty information sent to Institutional Research. Desire requested approval, decision or information by 8/1/03.** (3) In the interim, data from the MC Faculty Database could be handled two different ways. **First**, the data could be uploaded into HRS at a minimum of weekly, and when necessary, before any snapshots of such data are taken for the Data Warehouse. **Second**, the data could be extracted directly from the MC database and loaded into the Data Warehouse. (4) Reports on the faculty data in HRS should be run and verified on a routine basis by appropriate personnel.	1-2	2-4	**2** (extract logic), **3** (extract logic) **4** (data quality reports run routinely and always prior to snapshots)

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14	**Incomplete instructor (faculty and TAs) credential information in HRS. (3/25/03 TA Credentials meeting. Earlier meeting 9/10/02.)** The credential information in HRS is incomplete, and the required information for TAs has never been entered. This data is critical to ensuring those teaching courses are qualified. The incompleteness of the faculty information is primarily a function of the lack of an automated means to upload the data from the MC Faculty database and the files in Institutional Research.	**(1)** Departments must be responsible for collecting and entering the instructor credential information. **Desire requested approval, decision or information by 6/27/03.** (2) An automated means of uploading this additional data from the IR files should be implemented. (3) Reports should be written and reviewed to verify those teaching courses have the appropriate credentials. (4) Such faculty data should be extracted from the MC Faculty DB for all colleges using this system, and from HRS for all other colleges.	1	1, 2, 3	**2** (HRS batch job), **3** (data quality, operational and analytic reports), **4** (extract logic)
15	**Missing HRS instructor assignments. (3/25/03 TA Credentials meeting.)** It is not uncommon for academic administrators and other staff to teach a course. Some of these individuals have temporary and/or part-time "instructor" assignments in HRS and get paid for the effort. Others do not have such an assignment record and get no pay. This inconsistency creates gaps in the data when we attempt to join the SIS course instructor data to the corresponding data in HRS. This is needed to do allocation of course credit and contact hours and tuition across departments, check for academic credentials and will be required if we attempt to calculate the cost of teaching each course.	**(1)** Anyone teaching a course in SIS needs to have an appropriate "instructor" (faculty or TA) assignment in HRS active during the particular time period for the course, reflecting the amount they are paid for teaching courses. **Desire requested approval, decision or information by 6/27/03.** (2) For those academic administrators and other staff who teach courses without compensation, their HRS assignment should have a $0 salary. The institution needs to decide how to assign a "cost of instruction" to the courses these individuals teach. Should these courses reflect $0	1, 2	1, 2	**1** (possible programming change in HRS if $0 pay creates any problems), **2** (extract logic to calculate cost of instruction), **3** (data quality and analytic reports)

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		cost of instructor (based on the $0 pay on their HRS assignments), or should we develop an "average" salary to be assigned in the calculation of course instructor costs for such courses? **Desire requested approval, decision or information by 6/27/03.** (3) Reports should be written and reviewed to verify those teaching courses have the appropriate instructor assignments in HRS.			
16	**Meeting patterns in Schedule 25 for Medical Center courses are not the same in SIS. (Original issue #31 from 7/24/02.)** The Medical Center lists blocks of instruction as separate events in Event 25 since block instruction is not predictable from semester to semester and year to year. **Is the instructor data tied to the meeting pattern data in Schedule 25 for the MC?**	(1) Reports/extracts should be written from data in Event25 to get this information. (2) To improve data consistency within the Data Mart, the meeting pattern data from SIS should be converted to the date specific detail record format currently used in Schedule 25 to record the Medical Center's course meeting patterns.			**1 and 2** (extract logic; data quality and operational reports)
17	**Should we attempt to track information about percentage allocations of multiple delivery mode courses? (Original issue #18 from 7/17/02.)** This data will be important in tracking the increased use of instructional technology and will necessitate matching the course delivery modes to the classroom technology (smart classrooms). Currently	**(1)** A revised coding system should be developed in SIS that permits a reflection of the current pattern of modes and percentages with additional coding capacity to accommodate new modes as they become available. For example, a new delivery mode code could be created to reflect 75% traditional and 25% Internet,	1, 5	1, 2	**3** (data quality reports), **4** (data required in Data Mart, analytic reports)

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	the system does not have the capability to code the various modes and the percentage of each mode being employed within a course. (**NOTE:** The CPE currently defines a Distance Learning course as one where more than 50% of its delivery is over the Internet.)	etc. While it will not be possible to account for every combination within the existing system, attempts should be made to account for the combinations that are the most prevalent. **Desire requested approval, decision or information by 6/27/03.** (2) Each department should enter the correct delivery mode code in SIS to reflect the individual mode (100%) or the correct delivery mode code to reflect a specified percentage distribution among multiple delivery modes, at the time the course is listed. This will make student advisors aware when it is not a traditionally offered class. (3) Reports should be run to compare delivery modes with attributes of the classroom to which the course is assigned, in order to identify inconsistencies. (4) A more precise table of delivery mode codes that breaks down the codes into individual modes with associated percentages should be available in the Data Mart, so that it will be easier to report on courses that are being delivered either completely or partially via a particular delivery mode. For example, a delivery code of "X1" may be defined as traditional delivery 50% and Internet delivery 50% in the CMDM. (5) The issue of allowing multiple delivery modes for each section of a course, with			

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		an associated percentage, should be considered during the ERP implementation.			
18	**How is the cost to be calculated for developing and delivering a course through differing delivery modes?** **(Original issue #21 and #24 from 7/17/02.)** A response to this question is closely tied to an agreed upon set of cost variables related to traditional face-to-face instruction, similar to the highly detailed costing models that have emerged for distance education delivery. Although such cost information has value in and of itself, it does not enhance decision-making unless comparative information is used regarding the construction and maintenance of buildings, teaching loads as a percent of effort, and other elusive and often nonstandard data. The absence of fixed and variable costs as would be employed in other industries is unique to higher education in general often being confounded by debates about institutional purpose and quality.	**(1)** A special task force should be created by the Provost to conduct a pilot study to identify pertinent costs variables and gather data to produce a costing model for the institution that could ultimately be applied across the institution and its academic programs. This would enable the institution to better project its use of intellectual and financial resources in a systematic manner. **Desire requested approval, decision or information by 12/31/03.** (2) Rules should be developed for calculating instructor costs based on data such as percentage allocation for credit hour (or contact hour) generation on the course instructor record, and/or the percentage allocation of instructional effort in FES, and/or the salary for instructional assignments in HRS, and/or the type of course and/or delivery mode.	1	1	**1-2** (operational and analytic reports)
19	**What is the definition of "Prime Time" in terms of undergraduate course schedules? (Original**	**(1)** Since individuals tend to avoid 8:00 AM classes, it is recommended that	1		**2 and 3** (analytic

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	issue #15 from 6/26/02.) At the October 12, 1998 meeting, the University Senate adopted a policy on Academic Facilities (Utilization of Classroom Space) for the Lexington Campus. This policy established standardized meeting patterns for prime-time and prime-time was defined as 8:00 AM to 3:00PM for MWF classes and 8:00AM to 3:15PM for TR classes.	consideration be given to revising the definition to 9:00 AM to 3:00/3:15 PM for undergraduate courses, and that a course be considered "prime-time" if at least part of its meeting patterns fall into this timeframe. **Desire requested approval, decision or information by 6/27/03.** (2) An analysis of course demand data and enrollment persistence over the semester should be made through **weekly snapshots** to test the accuracy of the Senate's definition. (3) Reports should be written to compare the statistics for courses using the existing definition of prime time and the proposed new definition. (4) A flag should be set in the Course Management Data Mart to indicate if a course is prime time.			reports), **4** (extract logic, new data element, analytic reports)
20	**How are duplicated room counts to be defined and handled? (Original issue #10 from 6/12/02.)** As we understand this problem (to use 10 sections with an enrollment of 25 students each of the Psychology Courses as an example), there are two hours of common lecture plus a separate lab or recitation session for each of 10 sections. When scheduled, each of the 10 sections lists the same lecture hall and a separate room for the third hour of lab. When determining room utilization, the use of	(1) **Optimal solution:** Create two related courses that must be taken together and list the lecture for 2 credits in the large lecture hall and the lab or recitation as a separate 1 or 2-credit experience in a separate room. This is done for lecture lab courses elsewhere within UK. This would require a relatively straightforward course change. While SIS would allow such a structure, there is no current way to	1	1, 2	**2** (extract logic)

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	the lecture hall is duplicated ten times rather than just once. Also, because several sections meet together in a large room, if we do not combine the enrollments of all the sections meeting in that room, then the utilization report would show the lecture room as under-utilized with only 26 students rather than 260.	automatically ensure a student enrolls in both the lecture and lab. To make this change within SIS would take considerable programming effort, and would create other academic issues related to how the failure of one course (lecture) and not the other (lab) should be handled, how grades would be calculated, etc. Consequently, this issue needs to be taken into consideration during the ERP implementation. (2) Programming should be done at the point the data is extracted from SIS and loaded into the CMDM. The resulting data structure should eliminate duplication based on date, time and location of course, when calculating total room utilization. However, it should also allow summary across all such courses for determining enrollment, credit hour generation, etc. This procedure does not solve the problem, only manages it.			
21	**How do we calculate what is/is not a standard meeting pattern and the associated course contact hours? (Original issue #41 and #42 from 8/23/02.)** The standard meeting pattern is MWF for 50 minutes beginning on the hour, or TR for 75 minutes beginning on the hour or half hour. Every meeting time not in this metric is non-standard. The amount of weekly course "elapsed time or contact	**(1)** The institutional definition of a standard meeting pattern (MWF for 50 minutes or TR for 75 minutes) should be evaluated, to determine if these are really the only "standard" meeting patterns in our current environment. **Desire requested approval, decision or information by 6/27/03.**	1	1	**1** (data quality and analytic reports), **2-4** (extract logic, new data element; data quality and analytic

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	hour" for each meeting pattern is simply the difference between its start and stop times, multiplied by the number of days per week.	(2) Once the standards above are defined, then can we assume that any course altering from those meeting patterns is "non-standard", or do we need to define any course that contains one of the above meeting patterns in addition to a meeting pattern that is different "standard" even though it does not exactly meet the standard? (3) Two flags should be set in the CMDM to indicate standard and non-standard meeting pattern at the **course section** level. In each flag, a value of "1" would indicate that course contains that type of meeting pattern. **Should we also flag it at the individual meeting pattern level, and count the number of meeting patterns for a course section that are standard and non-standard?** (4) The amount of "elapsed time/contact hour" of each meeting pattern needs to be located on each course meeting pattern record and summed at the course level. There should be statistics by week and then for the total term.			reports)
22	**For which meeting pattern types do we want to calculate course statistics (i.e. MWF, TR, etc.)? (Meeting with Lu Wang on College Profile Report, original issue #40 from 8/23/02.)** In the past, staff have been asked to generate reports on the number of courses, contact hours and credit hours for	**(1)** The administration should identify the course meeting patterns for which they wish the CMDM to generate statistics. In cases where a course has a mixed meeting pattern, then rules should be defined as to which meeting pattern	1	1- 2	**1** (extract logic, new data element, data quality reports) **2** (analytic reports)

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	courses with a MWF and TR meeting pattern. There are other meeting patterns for which statistics could be calculated (i.e. one class session/week of 150 minutes, extended weekend classes, etc.) Not to look at other meeting patterns is to miss considerable data.	category to which the statistics should be attributed. **Desire requested approval, decision or information by 6/27/03.** (2) Data for various meeting patterns should be collected and analyzed to determine optimal times for students and to ensure a complete College Profile Report.			
23	**How much time do we "pad" between classes to calculate "hours of usage" for the room, for both standard and non-standard meeting patterns? (Original issue #43 from 8/23/02.)** A MWF class of 50 minutes is "padded" an additional 10 minutes for students to enter and exit the room. A TR class of 75 minutes is "padded" 15 for students to enter and exit the room. There is no consistency in "padding" non-standard meeting patterns.	**(1)** The administration needs to define the amount of "padding" (i.e. minutes we need to add to the actual course minutes) to calculate room utilization for non-standard meeting patterns. A **minimum of 10 minutes** should be added to non-standard meeting patterns for student entrance and regress. **Desire requested approval, decision or information by 6/27/03.**	1		**1** (extract logic, operational and analytic reports)

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24	**Define a Smart Classroom. (Original issue #2 from 6/05/02.)** A review of policies at other institutions quickly reveals there is no standard definition for what constitutes a "smart classroom." There is a wide range of functionality that can be incorporated into a smart classroom, though not all classrooms may need to be equipped in a similar manner. Some institutions classify their classroom by levels, e.g. Level I, II, etc. A more useful approach may be to select room codes and labels that are more descriptive of the functionality of the room.	(1) A review of existing classrooms should be made to inventory their current technological capabilities. Other instructionally relevant non-technological features should also be included such as a moveable configuration of seating for class interaction. **(2)** Rooms could be classified simply as an: **"Networked Classroom"** has only a campus network connection (wired or wireless), but no other technology. **"Electronic Classroom"** those having an Internet connection and a podium mounted computer and/or connection for a laptop, with a graphic projector or TV monitors for viewing. A more media rich environment could be classified as a **"Multimedia Classroom"** that builds on the electronic classroom infrastructure to include such items as a DVD, VCR, document camera, sound system, etc. The final classification would be an **"Interactive Television Classroom"** or ITV classroom that would be a special use room having features of the electronic and multimedia rooms with the addition of cameras, monitors, etc. for two-way audio-visual transmission. (The last three classifications are based on EDUCAUSE information.) **Desire requested approval, decision or information by 6/27/03.** (3) The Provost should appoint an individual	2-4	1-6	**5** (SIS or Schedule 25 programming), **6** (ACCESS database)

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		or group of individuals to determine the classification of classrooms based on the above definitions. A group of individuals from the DLTC, Technical Academic Support, Library (AV), Registrar's Office, Networking and an "academic" representative would be helpful. **Desire requested approval, decision or information by 6/9/03.** (4) A systematic plan should be developed for upgrading classrooms and coding them in the classroom-scheduling program. Upgrades should be made in a manner that will provide access to such rooms evenly across campus. (5) If feasible, an attempt should be made to create and/or modify computer programs in SIS or the room scheduling software to accommodate requests of a specific type of classroom to meet the instructional needs of a course. (6) An inventory of all smart classrooms on campus should be maintained by the Registrar's Office.			
25	**Incomplete information on leased and free space used for teaching courses. (Original issue #28 from 7/24/02, meeting on Facilities on 3/19/03 and emails on 6/13/02 and 2/10/03 from T. Prince.)** How should courses taught off-campus or in leased facilities be handled in institutional reporting? It	(1) There needs to be more coordination between the facilities and SIS reporting. It would appear it is incumbent on the facilities reporting process to identify locations not in the UK inventory of facilities, and track them separately for		1-5	**1-2** (reporting to CPE?), **5** (data quality report), **6** (analytic reports),

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	appears the institution has received mixed messages from the CPE in the past. For instance, how do we handle a building owned by Morehead State University, but we use it for scheduling a course? The SIS system does not contain data on whether a facility is leased or not at the time the room is built into the schedule. The room file in SIS is designed to provide the student with information on where their class is meeting. It was never intended to address other types of reporting. SIS can track off-campus offerings by their section number, but this standard is not consistently followed. Courses delivered through DLTC, including off-campus courses, are identified in SIS using a combination of Delivery Modes (or Program Reporting Type), Site Sponsor (RC370 on screen 137), and Program Administrative Group (RC277). Currently, the accuracy and completeness of the "free space" (UK does not pay for its use) in the Plant Assets Facilities files is of concern. The only available "free space" data is for those buildings where UK has capital equipment. If a goal of the institution is to more accurately reflect/report on when and where we are holding courses, then the leased and free space needs to be reflected in the Plant Assets files.	reporting to the CPE. (2) When a UK course is offered on another campus, the hosting campus should report the room as being utilized **(to the CPE?)** (3) Distinction between UK owned, leased and free space should be reflected in the Plant Assets files. (4) UK departments should promptly provide information to Real Property and Plant Assets to reflect all off-campus leased or free space used in instruction, including building and room data. (This same procedure may be needed for reporting use of leased and free space for research, administration, etc.) (5) Reports should be run to evaluate the data in SIS on off-campus courses and the availability of the corresponding space data in the Plant Assets files. Any missing data should be obtained from the appropriate departments. (6) Once the off-campus instructional space data has been collected and entered into the Plant Assets files, then reports should be run to analyze how much off-campus space is being used for instruction, how often, and what percentage of our total courses are taught off-campus and where. (7) Reports should be written to evaluate any inconsistencies in the use of Delivery Mode, Site Sponsor, Program Administrative Group and Program Reporting Type to identify off-campus			**7** (data quality reports)

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		courses.			
26	**Reuse of building numbers in the Plant Assets Facilities files. (3/19/03 meeting on Facilities data.)** The past practice has been to reuse building numbers in the institutional data files. The CPE has historically allowed us to reuse a building number after several years. However, this makes doing historical reporting and analysis very difficult. Plant Assets has assigned ranges of the four digit building numbers to campuses in the past. They have begun reusing the Ashland Community College building numbers recently for main campus buildings. Expanding the four digit building number in the numerous computer systems storing this data is cost prohibitive at this time.	(1) UK should only reuse former community college building numbers to create new building numbers for the main campus. **Desire requested approval, decision or information by 6/27/03.** (2) The building number format should be reviewed as part of the ERP implementation.	1-2	1	
27	**Room number, building number and building name standards do not appear to be followed or enforced on campus. (Original issue #30 from 7/24/02.)** The Facilities Building and Room files owned by Plant Assets contain the official record on facilities data. However, building numbers used as the key to these files, and used for reporting purposes, are not displayed on signs and are not the building codes used within SIS and printed in the Schedule Books. (SIS uses building abbreviation codes, not the numeric building code used within the Plant Assets' files.) Furthermore, building names	(1) Each room should have a unique identification number and building code that is understandable to students, faculty and others responsible for locating the space. **Desire requested approval, decision or information by 6/27/03**. (2) The institution should choose what the "public" building number and name should be, and these should be displayed on signs and printed in institutional publications that may be required by the students and others to physically locate a	1-3	1-5	**2** (SIS program to produce schedule books?), **3** (changes to Plant Assets Room file), **6** (extract logic, tables; data quality and operational reports)

	Issue	Recommendations/Further Actions	Policy or Definition	Procedure or Data Entry	IT Tasks
	often vary between systems. Some systems have the "official" building name, while others the most commonly used name. For example, "Peterson Service Building" versus "Service Building". Room numbers also vary between systems. The Plant Assets' Room file does not accommodate the current Medical Center room numbers. Two sets of room standards can be found at under "Design Standards – 00030S01" at **http://www.uky.edu/Services/CPMD/ukstandards/Divisions/Master.html**. Furthermore, departments sometimes change the room numbers above the doors, and these numbers do not match the room number standards or the official file. (For example, room number "001" may appear as "1" on the sign.) Lastly, the room number format for purposes of labeling signs is insufficient for using the room number as a "key" within a facilities database. The key needs to be structured in such a fashion that the room prefix/wing, floor number, room number and room suffix are physically in the same locations in each room number element in the database. In short, we should be able to electronically "parse" the room number element to determine floor, etc. This structured format is required to merge facilities data with related information in other systems. However, the existing Room file in Plant Assets does not accommodate this structured number. .	building. All campus maps, and other publications should be required to use only the agreed upon coding to maintain consistency. **Desire requested approval, decision or information by 6/27/03**. (3) Recognizing the room number displayed on a sign may not be of the format required for a key to a database record, there should be two additional room numbers added to the existing Room file owned by Plant Assets. The first new element is a 10 character field where the first three characters are the room prefix/wing, **the next two digits the floor,** the next two digits the room number and the final three characters the room suffix. The second element that needs to be added would be a 15-character room number that appears above the door to the room. **Desire requested approval, decision or information by 6/27/03**. (4) Plant Assets should collect data on the two new room number elements. (5) Users should be oriented to the new system of identification. (6) A cross-reference table should be created in the Course Management Data Mart for the building number/abbreviation, and the building names. Another table should be in the data mart to contain the cross-reference with the three room numbers in Plant Assets' Room file, as well as the			

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		room number entered in SIS.			
28	**Define "room conditions" for classrooms. 4-point scale used previously. (Original issue #44 from 8/29/02.)** This particular item refers to the physical condition of the room in terms of health and safety issues, general appearance, climate control, functionality, condition of furniture, etc. Currently, a four-point scale is used in the Facilities Report: "New, Good, Fair and Poor." It is been suggested that "Excellent" be used in place of "New" since it seems to assume new is equal to excellent and may not be. The more important question is what does each of the classifications mean. **Suggested definitions:** **Excellent** – Environment requires no corrective measures for intended function. **Good** – The only corrective measures required are for "cosmetic" issues that do not affect the ability to use the room for its intended function. **Fair**- Required corrective measures include at least one issue that affects the ability to use a room for its intended function. **Poor**-Environment requires numerous corrective measures to address issues that render the room useless for its intended function.	(1) A committee or task force should be composed of faculty and staff members who can devise a criteria, or definitions of the existing criteria, that can be used to evaluate each room. Possible membership should include representation from room schedulers, faculty, Plant Assets, AV technical support, etc. Members should evaluate the rooms independently, compare evaluations to determine the extent of calibration or agreement the criteria provides, and revise it accordingly so that the criteria can be applied reliably. Another suggested solution is to ask the Faculty Senate to develop a set of criteria they would use to evaluate the quality of classrooms, and then the above committee could assess the condition of all classrooms based on the extent to which the environments meet these criteria. **Desire requested approval, decision or information by 8/1/03.** (2) Rooms should be assessed once or twice a year by a team who can ensure corrective actions will be implemented. (3) Similarly, an office or academic support unit should be charged to develop criteria as above and conduct routine evaluation visits. **Desire requested approval,**	1, 3- 4	1-4	**1** (data quality and operational reports)

Course Management Data Mart (CMDM) Policy and Procedure Issues

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		decision or information by 8/1/03. (4) Criteria for evaluating room conditions should be explored during an ERP implementation, as a modern Facilities Management System will likely provide a more detailed analysis than the existing system's four-point scale.			

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29	**Room classifications (room use codes) in the Plant Assets file need to be reviewed. (Original issue #30 from 7/24/02 and #46 from 9/11/02. Related to #28 above.)** We teach many courses in rooms that are not designated as classrooms or class labs based on their room use codes. In recent years, Plant Assets has relied on the departments to designate these room use codes. However, these codes greatly affect our reporting on instructional and research space to the CPE and others. Consequently, the accurate assignment of room use codes is critical to institutional reporting, and potentially, institutional funding.	**(1)** An individual or group of individuals designated by the Provost should do designation of room use codes. **Desire requested approval, decision or information by 6/27/03.** (2) Many conference rooms are used more for instruction, particularly seminars, than for meetings and should be coded as instructional space. (3) An audit should be made of all the space on campus, to ensure room use codes are accurate, and the definitions applied consistently.	1	1-2	**2-3** (data quality, operational and analytic reports)
30	**Define equipment conditions. (Original issue #46 from 9/11/02 and 3/25/03 email from P. Cooper. Related to #24 above.)** Equipment condition codes needs to be clearly defined and applied.	**(1)** Recommend the following general equipment codes: **Poor** - a piece of equipment that's either obsolete (i.e. old PCs) or in poor physical condition (PC not working or needing significant repairs), **Good** - equipment that is in good physical condition (working well) and where the age of the equipment is irrelevant, and **Fair** - equipment between the two extremes. **Desire requested approval, decision or information by 6/27/03.** (2) Room and technology assessment, planned renovation and systematic upgrades of equipment should be embedded in the academic support	1	2-3	**1-2** (data quality, operational and analytic reports)

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		process. (3) A "SWAT" team should be available to make on the spot repairs and replace bulbs, etc.			
31	**Does the Facilities Review calendar need to be changed to be in sync with the calendar for course enrollment snapshots? (Original issue #16 from 7/03/02.)** Currently the review calendar requires facility information to be reviewed and updated within three time periods a year: by September for Spring, by November for Summer and by February for Fall. The time lag between the reviews and updates, and the start of classes, introduces an opportunity for inaccuracy.	(1) The Facilities Review calendar should be updated several times/semester, and as close to the start of classes as possible. In this way classroom changes (i.e.. seating capacity, technology, or unavailability) can be factored into the scheduling process.		1	**1** (snapshot frequency)
32	**Define enrollment. (Original issue #48 from 9/11/02.)**	(1) Enrollment is registration into one or more "credit" courses (see Screen 125 in SIS) at the University; one who matriculates. **Desire requested approval, decision or information by 6/27/03.** (2) The administration should decide if part of the statistics generated from the CMDM should include credit courses/hours attempted, credit courses/hours completed, non-credit courses attempted, non-credit courses completed, etc. **Desire requested approval, decision or information by 6/27/03.**	1-2		**1-2** (extract logic, operational and analytic reports)

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	Issue	Recommendations/Further Actions	Policy or Definition	Procedure or Data Entry	IT Tasks
33	**What is the definition of a full-time and part-time student? (Original issue #9 from 6/12/02, #25 from 7/18/02, #36 from 8/7/02 and email on 2/10/03 from T. Prince)** The definition of a **full-time student** (UK & LCC) displayed on Screen 111 in SIS is accepted as: Undergraduate: 12 or more credit hours (Spring/Fall) and 9 (Summer) Graduate: 9 or more hours for credit (Spring/Fall) and 6 (Summer) Dentistry or Medicine: 1 or more hours for credit Pharmacy: 12 or more hours for credit Law: 10 or more hours for credit This definition is adhered to when enrollment data is reported to the Integrated Postsecondary Education Data System (IPEDS). (Source: National Center for Education Statistics) **NOTE:** These "credit" courses must contain a grade type of "P/F" or blank (normal grading option). Other grade types such as "audit" do **not** count towards full-time status. A grade type of **"AU"** (audit) does not count in a student's attempted hours, earned hours, quality hours or quality points. A grade type of **"XC"** indicates the student's full-time/part-time status is determined based on the number of hours the student is attempting in that course. The number of hours is also used to determine the tuition charge. However, if the student is enrolled 0 hours in such a course, then the status is "Z" (full-time with 0 credit hours – see below) and they are **not** charged tuition. A course taken with a grade type of **"XD"** does not	(1) In the data mart, the calculations for determination of full-time students should be done at the point of extraction based on the logic to the left, and a flag set to indicate status. Since student status involves checking multiple SIS elements and multiple values within them, establishing a flag in the CMDM to identify status will simplify user reporting. **(2)** If "drill-down" capability is required in the CMDM to review the courses used to determine this full-time/part-time status, attempted hours, earned hours, quality hours or quality points, then it will be necessary to include only credit courses with valid grade types used to calculate each of these statistics. A group of flags should be set on each student course record to indicate if the course counts toward full-time status, attempted hours, earned hours, quality hours and quality points, **(See NOTE to the left.)** (3) The amount of tuition generated in each of these conditions should be calculated and stored in the data mart. (4) The SIS table **UXTUX201** containing a list of courses, which by default determine full-time status, needs to be part of the data mart. (5) We need separate definitions and flags in the CMDM to indicated **FT/PT status** for each of the following: institutional enrollment reporting, operating budget			**1-7** (extract logic, new data element, operational and analytic reports), **4** (table)

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	count in earned hours, quality hours or quality points, but **does** count in attempted hours. **"Correspondence courses"** offered through the Office of Independent Study are identified with an "I" in the section number. These courses do **not** count toward a student's full-time status, but enrollments are reported to the CPE. **Exceptions for 0 Credit Course**: Students enrolled in specific courses (identified in SIS) are considered full-time for enrollment purposes such as EGR 399, ACC 399, graduate level courses of 748, 749, and 769, etc. These are not always full-time for tuition purposes, however they enable students to be retained in the system as active enrollments and remain eligible for loan deferment, health insurance, financial aid, etc. See SIS table **UXTUX201** for courses having less than full-time credit hours but count as full-time enrollment. Inherent in the acceptance of the full-time student definition as noted, a **part-time student** is defined as enrolling in fewer hours than the minimum full-time hours or an absence of enrollment in other courses that meet the full-time condition. .	calculations, financial aid (Federal) reporting and tuition calculations. (6) We need separate definitions and amounts in the CMDM to indicated **credit hours generated** for each of the following: institutional enrollment reporting, operating budget calculations, financial aid (Federal) reporting and tuition calculations. (7) We need separate definitions and amounts in the CMDM to indicated **student FTE** for each of the following: institutional enrollment reporting, operating budget calculations, financial aid (Federal) reporting and tuition calculations.			
34	**How is a first-time, full-time "student" defined? (Original issue #8 from 6/12/02.)** The University	(1) The current codes and definitions should be continued. They are the same as used		1	**2** (extract logic, new data

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	has had a standard set of definitions that are well understood within the institution by the Admissions and Registrar's Office. If a student is enrolled in 12 or more hours for credit and this is the first college work attempted at UK - AFTER high school graduation - then the student is classified according to one of five Registration Type codes (RT215 on Screen 111) in SIS for his/her first Fall term at UK: **FAP** – "Pure" first year student – first-time/full-time, **FPW** – First year student with prior college credits (earned while in High School), **RMP** – Remedial Minority student, **RPS** – Readmit for first-time freshman whose collegiate work started at UK during the prior Summer session (Effective Fall 2002), **RPW** – Readmit for work taken prior to high-school graduation. **NOTE 1:** The students noted above will have a value of "Y" in the GRSCOHO element on the CPE file of the enrollment data. **NOTE 2:** MA 108 - Remedial Math - though not counting toward graduation, does count toward full-time status.	by CPE. (2) A flag should be created in the CMDM to identify these "first-time, full-time" students, without the user needing to understand all the various Registration Types that are included in this definition. (3) Since the RPS Registration Type was effective starting in Fall 2002, prior year data should be extracted to include such students if they can be identified by other means.			element, operational and analytic reports), **3** (metadata)
35	**Do retention rates for groups other than first-time full-time students need to be looked at, such as graduate level; and if so, what other groups?** **(Original issue #19 from 7/17/02 and 3/17/03**	(1) It is recommended that retention rates be tracked for a variety of groups in order to have available pertinent data. In particular, the following groups were identified:	1-2		**2** (IT priorities) **3** (extract and snapshot logic, new data

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	meeting.) As the University engages in greater analysis of how it is serving its various student constituencies, it seems important to be able to track and identify where the institution can improve its retention rates. SIS coding already permits the tracking of many groups that might be identified for longitudinal study, although it is not routinely done currently. Admission categories in combination with other demographic and student characteristics could be used in identifying at risk groups of students and to prepare appropriate interventions, as well as shaping admission and other policies.	(a) First-time full-time students (b) Transfer students from KY Community & Technical Colleges (KCTCS). (c) Transfer students from LCC (d) Transfer students from other 2-Year institutions public & private (non-KCTCS) (e) Transfer students from other four-year institutions (public and private) (f) Graduate students (g) First year students who have some prior college credits (FPW) (h) Non-degree students (i) Readmitted Students (j) Students still in high school (k) Professional school students (l) First generation college students **(m)** Legacy students (children of UK alumni) **Desire requested approval, decision or information by 6/27/03.** (2) The administration should prioritize the above retention groups in terms of programming resources. **Desire requested approval, decision or information by 6/27/03.** **(3)** Need to add the above retention statistics to the Performance Measures for the CMDM, and then define the fields and values in SIS. **However, some of these may be postponed to be part of the Enrollment Management Data Mart.**			elements, analytic reports)

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36	**How will multiple majors and minors be handled within the CMDM? (Original issue #11 from 6/12/02 and 6/13/02 email from T. Prince.)** SIS can currently store 4 majors (RT120, RT125, RT145 and RT150 on record **IARRCRT**) and 2 minors (RT130, RT155 on record **IARRCRT**) for each student in the following configuration: **Primary Program** of 2 majors and 1 minor, and **Secondary Program** of 2 majors and 1 minor. The problem is the SIS degree (record **IARRCRA**) can have 3 majors and 2 minors in one program. All majors are reported to the CPE based on CIP codes, but minors are not required. If both programs have the same CIP code, then the CPE sees this as an error.	(1) The administration should decide how it wants to report majors and minors in the CMDM (i.e. based on the student's primary and secondary programs, or based on their degree program). **Desire requested approval, decision or information by 6/27/03.** (2) All majors and minors recorded in SIS should be extracted and loaded into the CMDM for future analysis and reporting. All majors and minors should be counted in summarizing the number of each major and minor. However, when calculating student headcounts, duplication of student records for multiple majors and minors should be eliminated. If major and minor information were requested for a student "headcount", then only the primary major and minor would be reported for each student.	1	2	**1-2** (extract and summarization logic, data quality, operational and analytic reports)
37	**Definition of rules for calculation and summarization of student headcounts. (Multiple meetings.)**	(1) Student headcounts should be calculated based on the "unique" student ID at each level of aggregation. In cases where duplication can exist at lower levels of aggregation, the sum of the headcounts at the lower levels will **not** be the same as the amount at the higher level. This becomes an issue if users want to use the roll-up and drill-down functionality. For	1		**1** (extract and summarization logic, operational and analytic reports), **2** (metadata)

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		example, the sum of the number of students (headcount) taking courses within each department within Arts and Sciences, will not equal the number of students (headcount) taking courses in Arts and Sciences, if students take a course in more than one department within Arts and Sciences. **Desire requested approval, decision or information by 6/27/03.** (2) The metadata within the CMDM must clearly state the rules for such aggregations.			
38	**Definition of rules for aggregating statistics based on CIP codes. (Multiple meetings.)** Some CIP codes assigned to accounts and departments provide a more detailed level than others, so the relationship between these different levels of CIP codes needs to be defined.	**(1)** The administration needs to define the business rules for aggregating and rolling up/drilling down statistics based on different levels of CIP codes. **Desire requested approval, decision or information by 6/27/03.** (2) Any constraints associated with aggregation based on CIP codes need to be defined within the metadata.	1		**1-2** (extract and summarization logic, metadata, operational and analytic reports)
39	**Definition of which statistics can be aggregated at which organizational levels. (Multiple meetings.)** Due to the data structures and the different patterns of activity, some of the statistics or performance measures may not be available at each desired level of aggregation. For example, headcounts for undeclared majors can only be aggregated at the college level, not the department level.	**(1)** The administration needs to define the rules on how they want to handle statistics that may not be available at each level of desired aggregation. **Desire requested approval, decision or information by 6/27/03.** (2) Any constraints associated with aggregation based on organizational levels need to be defined within the metadata.	1		**1** (extract and summarization logic, metadata, operational and analytic reports)

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40	**How are changes in Major to be handled? (Original issue #14 from 6/12/02.)** Changes in major are tracked on screen 191 by term and by date, and numerous major changes can be accommodated. However, there is no history of such changes kept in SIS.	(1) More frequent snapshots of enrollment data will be taken for the CMDM, so major changes by students can be tracked over time by comparing changes between these snapshots.			**1** (snapshot frequency, analytic reports)

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41	**What business rules are we going to use to calculate the statistics for the College Profile Report and/or the CMDM? Examples of such statistics include faculty and student (graduate and undergraduate) FTE. Do we defer to CPE, IPEDS, other? (Meeting with Lu Wang on College Profile Report, original issue #39 from 8/23/02 and #45 from 9/11/02.)** The requesting authority defines the calculations. It should be anticipated these would vary from agency to agency. For example, the formulas to calculate the faculty and student FTEs for IPEDS, CPE and Budget Office differ. We have to respond to multiple surveys using differing formulas.	(1) The Data Mart should calculate the values for each of these statistics based on each of the formulas, and the metadata should clearly define the difference between the calculated fields for users. **(2)** University administrators should decide which of these statistics they wish to use for internal reporting. **Desire requested approval, decision or information by 6/27/03.**	2	2	**1-2** (extract logic, new data elements, metadata, operational and analytic reports)
42	**Where feasible, should the Data Warehouse (including the CMDM) be designed to assess our progress in attaining Strategic Indicators? (Original issue #3 from 6/05/02.)** From a policy standpoint, it seems reasonable to expect there will be a need to tie SIS data to Strategic Indicators, accreditation reports, and other reporting requirements required by SACS, CPE, etc. for both internal assessment and external reporting. The strategic indicators are likely to change every **three** years with the revision of the University's Strategic Plan, and other agencies will adjust criteria over time. Consequently, the Data Warehouse should be modified when possible to respond to differing analyses of existing data and possibly the	(1) The Data Warehouse should contain data sets that are integral to the creation of institutional progress reports reflective of the Strategic Indicators and other reporting requirements. (2) The Registrar's Office and Institutional Research and Effectiveness staff should be involved early in the process to identify how best data can be collected for reporting purposes. (3) Whenever Strategic Indicators or other reporting requirements are being revised, Information Technology should be advised as early as possible in order to plan for the necessary changes to the Data		2-3	**1** (extract logic, new data elements, operational and analytic reports)

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	creation of new sets of data variables.	Warehouse in response to such needs.			
43	**How do we handle SIS departments, courses, majors, degrees, etc. shared between two or more FRS/HRS/FES department numbers? If there is a percent allocation for the faculty, do we use their prime department in HRS? Do we need to build a cross-reference table for the CMDM that identifies all of the "jointly" owned departments, courses, etc. and how should their course enrollment counts, etc. be made for summary reports? (Meeting with Lu Wang on College Profile Report and original issue #38 from 8/2302.)** SIS and FRS use different department number formats. An academic department may or may not be equivalent to a financial department number. Furthermore, in SIS a course can only belong to one department. When courses are cross-listed to more than one department, they appear separately in each department in the schedule book. However, SIS does not facilitate the tracking of which department(s) is actually providing the instruction.	(1) A cross-reference between academic and financial department numbers should be maintained. The Office of the VP for Institutional Research, Planning and Effectiveness would probably be the most knowledgeable about the data. (2) One college owns a degree, and one college owns an academic department. (3) Only one department can own a course. However, instructors from multiple departments and/or colleges can be used to teach a course. **(4)** There is a many-to-many relationship between degree and major, major and department, and major and course. **Consequently, reporting statistics on degrees and majors by department is virtually impossible.** (5) Reports on departmental course statistics should be tracked two different ways. The first should be based on the department that owns the course, and the second based on the course instructors' home academic unit and/or their prime department number in HRS. Tracking faculty efforts by the instructor ID (SIS) and employee ID (HRS), and allocating credit		1-4	**1** (table, extract logic), **2-5** (extract logic; data quality, operational and analytic reports)

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		hours and tuition generation based on the HRS department number, will better reflect the relationship between what departments are bearing the cost of instruction and these course related "productivity" statistics.			
44	**The Academic Year is defined as Fall, Spring, Summer 1, and Summer 2. Should this be changed, at least for internal reporting purposes within the CMDM? (Original issue #13 from 6/12/02.)** There is an increasing frequency of non-standard delivery patterns in the Summer (i.e., courses compressed into fewer weeks, courses starting or ending on a non-standard timetable, and courses falling partially into both the 4 and 8-week Sessions). A new definition of full-time status for the Summer may be required. The use of Summer 1 and Summer 2, or Fall 1 And Fall 2, etc. for class sessions within a term should have no effect on the aggregate data for the academic year for the three major terms.	(1) Defining the academic year as Fall, Spring and Summer should suffice for reporting in the CMDM. Session numbers can be used to distinguish the timeframe in which the course is offered during the term. **Desire requested approval, decision or information by 6/27/03.** (2) Rules for merging the Summer Sessions and setting full-time/part-time status should be based on the logic used for CPE reporting. **Concerns on merging Summer data regarding registration and billing issues, fiscal year rollover and funding should be addressed. Desire requested approval, decision or information by 6/27/03.**	1-2		**1 and 2** (extract and summarization logic)
45	**When should the University take snapshots of enrollment and associated data? (Original issue #6 from 6/05/02.)** Historically the snapshot was taken once per semester for the purpose of CPE reporting. For this CPE report, the Registrar's Office takes a snapshot 3-4 weeks into the term (this item is not retained), perform edits so the data can be as clean as possible when the report is submitted.	**(1)** The University should define the critical events (dates) that warrant a snapshot of the data for the CMDM. Snapshots should be taken immediately after each major calendar event in the academic year in that each of these events may be related to students' decisions about their enrollment status. At a minimum, snapshots should	1-2	1-3	**1 and 3** (extract and snapshot logic)

Course Management Data Mart (CMDM) Policy and Procedure Issues

(**Data quality** reports highlight problems with the data, based on pre-defined rules.
Operational reports contain data used in day-to-day operations.
Analytic reports are those presenting data from multiple time periods, locations, etc. for which some type of comparative analysis is required.)

	Issue	Recommendations/Further Actions	Policy or Definition	Procedure or Data Entry	IT Tasks
	Actual reporting to the CPE is done **Oct. 15 for Fall and March 15 for Spring.** Several additional snapshots should be taken over the course of the semester in order to track the attrition of course enrollments over the duration of a semester and from year to year.	be taken for each term and target student population: during priority registration, after priority registration (first window of pre-registration), after secondary window of pre-registration closes, just before and after the first cancellation for non-payment of fees, first day of class, last day to add, official CPE snapshot date, last day to drop without a W grade, and end of term (after grades posted). **NOTE:** Some of these dates will vary depending on if we are focusing on UK or LCC, undergraduate or graduate or professional schools. **Desire requested approval, decision or information by 6/27/03.** (2) It is critical to the usefulness of the CMDM that all the required data is as complete, current and accurate as possible for each snapshot. Consequently, the administration needs to ensure all departments understand the critical dates, and the impact the data quality has on the institution's ability to do productive analysis. In addition, departments need to clearly understand the manner in which such data analysis will affect institutional decisions concerning academic programs, budget, etc. **Desire requested approval, decision or information by 6/27/03.** (3) Data to be included in each snapshot will be SIS course, student and enrollment data, FES distribution of effort, HRS active assignments, Schedule 25 data, Facilities			

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	Issue	Recommendations/Further Actions	Policy or Definition	Procedure or Data Entry	IT Tasks
		Building and Room data, Course Demand data from voice and web registration, updates to all CMDM support tables and possibly some FRS data.			
46	**Define the security levels to be maintained within the Data Warehouse**. **(Original issue #17 from 7/03/02 and #20 from 7/17/02.)** The Data Stewards have recently approved the value-based security for SIS data in the Data Warehouse Environment to be academic unit, and the financial department number for FRS, HRS and FES data. This security is based on the security within the online systems. This seems appropriate for detailed operational reports. The committee believes summary data (without identifying information) should be readily available for analysis and policy formation. Student and employee specific information should be limited to a need-to-know basis. The critical issue seems to hinge on student and employee names and social security numbers. If these identifying informational items were to be concealed, less stringent security would seem to be necessary. The CMDM needs to be developed in such a way that an individual's' identity can be hidden. For example, if a pre-defined report is generated with drill-down to details, and it is to be made available publicly on the web, then the detail should not include students' or employees' names or social security numbers. However, if a staff member has direct access to the CMDM and the	(1) The CMDM needs to be developed in such a way that students' and employees' identities can be hidden from those who have no need of the information or for whom it would present a security issue. (2) A unique "random" identifier should be generated for each student and employee within the CMDM. This identifier will be tied to the individual's name and ID (social security number) within a data table. However, only people with approved access to this table would be able to report on these fields. All others, and any "generic" report available on the web, would have the generated number as the unique identifier for the detail on any "drill-down" functionality.			**1** (security), **2** (table structure, extract logic and appropriate reports)

Course Management Data Mart (CMDM) Policy and Procedure Issues

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locations, etc. for which some type of comparative analysis is required.)

	Issue	Recommendations/Further Actions	Policy or Definition	Procedure or Data Entry	IT Tasks
	need for the information, then they would be able to access students' or employees' names and SSNs.)				