**ASOM stuff**

Informatics program standard: Fix the numbering to start with 1 instead of 5 and change any instances of computing and informatics to information technology

Database program standard:

Need to revisit the course specific standards and add in the cert prep classes like DBMS131.

Andrew made the motion to add the cert prep classes in addition to the existing standards. Skip seconded. Motion passed unanimously.

They should read:

DBMS130/131

DBMS150/151

Etc, for all listed courses except DBMS110

Skip made the motion to change the DBMS110 course standard to read: ….meets the Database Management and Administration (DBMS) program standard and holds a valid, non-expired industry recognized database certification or two years of documented database professional employment. Charlie seconded. Motion carried unanimously.

ASOM 6.8 – Reviewed

ASOM 6.3 – Reviewed; need to ponder what CTs look like. CTs don’t \*have\* to be a minimum of 15 credits (it does for financial aid, though). There is some review going on to maybe change the requirement of 15 credits taken from Ivy in order for the student to earn the credential.

Need to think about scaling these courses. Do we need an AS in Database? And do we need to have an administration and management track?

Instead of fully deleting the AS, can we just “hide” it or make it inactive? Matt E will have to see if we can do anything about it?

Suggest to just not advertise the AS program. Stop asking the students if they want a four year degree AND just because they might have credits don’t put them in an AS program, either.

Issue with the Admin vs Design track. Do we need both of these? Should we remove the Admin track? If Admin track is eliminated, then students will take DBMS150 so they do get a taste of Admin. Make 150 go across Oracle and Microsoft (sort of combining 150 and 240). DBMS230 gets redeveloped to cover Oracle PL/SQL and Microsoft T-SQL

Would need to redevelop the CORs for DBMS150 and 230

By deleting the Admin track, there would be some certificates that would probably be affected

It looks like could delete 250 and 240 and their associated cert prep courses. Could have a selective between 210 and 255.

150 and 230 would be mandatory (and CORs and classes both redesigned)

Mike will work up proposed curriculum sheets and get them out. We will vote on this course of action later.

Review 150 COR.

Need to remove vendor-specific language

Review 230 COR

Need to add in additional objectives to address different SQL flavors

Kris to look at modifying CORs for 150 and 230 to give to Mike M for polishing.

Think about collaborating between the campuses offering the higher level courses so there aren’t any overlap. Also, once the schedules are set, please send out to the curriculum and we can co-list in our region to get easier exposure for enrollments in those courses.

Look at a TES committee for DBMS…Mike will be on there of course. Anyone else?

Discussion about student success in online classes. Can we come to an agreement about some courses that we never offer online? Each program has some of these courses. However, we have to have buy-in from all campuses to do this. We can make them synchronous online/f2f only and not straight online courses. We would need to make sure to have supporting data of the failure rates to do this. Matthew has lots of this data.

There was some discussion around course caps as well.

Need to check consumable fees list. Mike to do this.

November 15th 3:30-4:00 is career fair at C4 building in Indy

**Database Management and Administration Program suggested revision for Fall 2018.**

Let me begin by stating that I believe that there is a strong demand in central Indiana and I suspect elsewhere in Indiana for graduates of this program. While your results may vary, we have had graduates start at $60,000+ right out of the program.

However, the program is not healthy as illustrated by the attached spreadsheet. This is data out of NewT and tracks the new admissions into the database programs since Fall 2015 by Region. We currently have approximately 400 students in the program. My guess is that just over half are actively pursuing a degree. Even with approximately 160 database majors in the Central Region, that really isn’t enough mass to make the current program viable. With the balance spread pretty evenly across the rest of the state, it become difficult to put enough bodies into seats as required by the administration.

That is why we have moved to synchronous delivery of some of the upper-level classes but we have faced significant pushback from students who want a F2F experience. We have had students drop out of the program because of the lack of F2F classes and we have been challenged to provide any path for some of our students to graduate in a timely manner.

The other challenge is the current makeup of the program and the four tracks we have available. There currently is both a Design and Admin track for both Microsoft and Oracle. This results in **15 classes**, all but one unique to this program, we have to develop, mentor and offer for the current program to be viable. In comparison, Software Development, our largest program has 6. We simple do not have enough students to support that number of classes or the effort involved supporting those classes.

What I am proposing is a slight contraction in the number of classes offered along with an effort to better define the available tracks within the program. I have discussed this with our advisory board and there is agreement on the following important points:

1. Database design requires a very different skill set as compared to database administrator and we need to make the distinction clear to both students and advisors. At my old company, the DBA’s worked on the server admin side and the DB designers worked with the coders and developers.
2. The group agreed that there were more Microsoft SQL databases and probable more available jobs but anyone trained in Oracle can bridge the gap between Oracle and MS SQL. This was certainly my experience managing a team of DB developers. They were able to move back and forth pretty easily.
3. It appears from the conversation I have had with Matthew Cloud that Oracle seems to be a more willing partner but as we have all discussed, we need to keep the course descriptions as vender free as possible.

Given the above rational, I would like to propose the following:

The Database Program would continue to consist of a Design / Maintenance and an Administration track but eliminate several of what are currently, Microsoft specific 200-level courses. Other courses would be retitled to eliminate specific mention of a software platform but would detail the industry certification currently associated with the course. **This would be very much in line with the current COR used by DBMS 130.** It is a perfect example of what I would like to do to the rest of the DBMS classes. **The goal would be to expose students to Access, MS SQL and Oracle while having the option of changing the underlying platform and to add content as needed. (Think big data, cloud computing, etc.)**

**Eliminate:**

DBMS 230, 231, 240 and 241.

**DBMS 210**: Course Title – Advanced Database Design and Development (Continuation of DBMS 110 which should be a fundamentals in Database and Development course)  
Catalog Description can stay the same as it mentions “Using software such as Access”.

**DBMS 150**: Couse Title – Enterprise Database Management Systems Administration I  
Catalog Description: Introduces program applications in an Enterprise database environment with emphasis on installing, configuring, modifying, and maintaining the database by means of structured query language and other tools included in the DBMS or offered by third-party vendors. The course will utilize one of the industry-standard Enterprise DBMS packages such as Oracle or Microsoft. The course will be tied to the Industry certification associated with the Enterprise DBMS used in the course.

No real changes would need to be done to the course content, material, etc. Currently uses Oracle.

**DBMS 250:** Couse Title – Enterprise Database Management Systems Administration II

Catalog Description: Students explore the automatic database management, monitoring, and tuning facilities in an Enterprise database management environment. Topics include the recovery from user errors and database failures including flashback data archive and flashback transaction backout along with the Total Recall capability. Enterprise Database Management Systems Administration II includes topics controlling resource utilization, using database scheduler, handling database corruption, and troubleshooting database problems. Students will set up user-managed/automatically managed backup strategies and database recovery operations. Additionally, students will explore advanced use of DBMS Administration tools and automatic storage management. The course will be tied to the Industry certification associated with the Enterprise DBMS used in the course.

No real changes would need to be done to the course content, material, etc. Currently uses Oracle.

**DBMS 255:** Course Title – Enterprise Database Development

Catalog Description: Enterprise Database Development students will develop applications in an Enterprise database environment. Students will utilize an integrated platform that supports Structured Query Language, Extensible Markup Language, and procedural languages in a simple fashion with high performance and scalability. Enterprise Database Development students will use many of the features of database application development including languages, tools, connectivity and technologies in a culminating database application development project. Additional topics will be included as needed.

No real changes would need to be done to the course content, material, etc. Currently uses Oracle.

**Summary:** While there needs to be some course titles and catalog descriptions changes, there is no immediate need to modify the course content, teaching material, etc.

**Tracks:**

There would be two tracks, a Design and Development track and an Administration tracks.

* Design and Development
  + DBMS 210
    - DBMS 131 1Z0-051 Oracle 11g Current Exam
  + DBMS 255
    - DBMS 256
* Administration
  + DBMS 150
    - DBMS 151
  + DBMS 250
    - DBMS 251

**Notes on AAS Degree:** Changed Selective III does require the student to either do an Internship or take the level 1 course in the other track. I like this idea as it offers the option to gain some exposure into the other track and I think this can be very beneficial.

**DBMS 110 Issues:** As most of you know, we have had some problems with DBMS 110. INFM 109 was supposed to have been redeveloped (I believe that it will be this summer) with significantly more database content. Some Programs no longer have DBMS 110 as a program requirement so the goal was to move more database content to INFM 109. Then DBMS 110 could begin at a slightly higher level. That hasn’t happened and I am not sure that the goal with INFM 109 is still the same.

The other issue we have is the student’s ability to install SQL on their machines, particularly since most haven’t taken DBMS 120; where they learn how to do that!

DBMS 110 should be a database fundamentals class that as a service course, contributes to the general education of all of the School’s students. I also believe that it should be based on Access or MySQL and not SQL Server. Again, since it is a service course, we need to realize that many companies use Access and/or MySQL and our students who are exposed to a database application on the job will probable see an Access application. Granted, our DBMS graduates will be dealing (we hope) with Enterprise DBMS’s but they will also see Access applications as will our other graduates.

Just an FYI: The Indianapolis campus has not used the C4IT version of DBMS 110 in our F2F classes and have shared our course with other campuses. Until we get this resolved, we would be glad to share our course with any campus obviously for F2F use only.

**DBMS 110 Conclusion:** I think that we need to apply to C4IT to do a rework of the DBMS 110 course to create a database fundamentals course using Access and as much OER material as possible. The course needs to cover more of the basics and become a better service course to the other programs.

**Attachments:**

* NewT report on Database Program students by Regions
* Spreadsheet with tabs on each of the degrees

|  |  |  |  |
| --- | --- | --- | --- |
| Course | Description | Health | Comments |
|  |  |  |  |
| DBMS 110 | Database Design | Poor |  |
| DBMS 120 | Database Server Installation | Fair |  |
| DBMS 130 | Management using SQL - MS |  |  |
| DBMS 131 | WFD SQL | OK |  |
| DBMS 150 | Oracle Admin I |  |  |
| DBMS 151 | WFD Oracle Admin I |  |  |
| DBMS 210 | Database Design Advanced using Access |  |  |
| ~~DBMS 230~~ | ~~SQL Server Dev~~ |  |  |
| ~~DBMS 231~~ | ~~WFD SQL Server Dev~~ |  |  |
| ~~DBMS 240~~ | ~~MS SQL DB Admin~~ |  |  |
| ~~DBMS 241~~ | ~~WFD SQL DB Admin 2012~~ |  |  |
| DBMS 250 | Oracle DB Amin II |  |  |
| DBMS 251 | WFD Oracle Admin II |  |  |
| DBMS 255 | Oracle DB Dev | Good |  |
| DBMS 256 | WFD Oracle Application Express |  |  |

August 25th, 2017

**Agenda for Database Statewide Curriculum Committee**

Attachments:

1. Latest DBMS Program Enrollment by Region and Admitted Term (Ok, NewT doesn’t do Campuses!)
2. DBMS Course seat counts by Class Region and Term
3. DBMS Majors by Code and Region

From these reports, we can see some significant trends and concerns.

**Question 1**: Indianapolis has never had a code for a DBMS AS degree and therefore we don’t have any. Do any of the campuses have any DBMS AS students?

**Vote item 1**: Should we eliminate the DBMS AS degree option from the Program. Not only do we have none, or few, an AS student would be better served academically in either the Informatics or Computer Science AS or TSAP degrees. I am in favor of this item.

**Question 2**: Several people, including myself, questioned at the summer conference call if we should eliminate the Administration option. It was discussed that most true DBA’s migrate from the Server Admin world and that was certainly true at my old company. I have not counselled one student who thought they wanted to be a DBA when in fact they wanted to be a database developer.

The problem is that per the third report, we do have a significant number of DBMS Admin CT students. My concern is that per report 2, they aren’t taking classes and there is a question about pathways to graduation. We aren’t offering the classes they need to graduate and when we try, we cannot get the numbers needed to run the classes, i.e. DBMS 240 and DBMS 250.

All DBMS students would take DBMS 150 which is an ADMIN course so they would get a taste of it.

**Vote Item 2:** Should we eliminate the Admin track? This also was discussed during the summer session. It would help us cut down on the number of course offerings that we have to develop, mentor and support. It would also help eliminate confusion on the part of students and advisors as to exactly what the student was taking. I am not sure how I feel about this as it impacts far more of our students that any other campus. There might be some short-term pain but I am leaning towards favoring this for the long-term gain.