Unit Planning during 2010/2011

Section II: Data Elements to Inform Planning.

Use data from 2009-10. Discuss data with your divisions /departments and your Executive Dean. **E-mail to Anna Kate with copy to your Exec. Dean by November 30th at 5 p.m.** Craig Taylor will provide direction on accessing data element information. Provide brief explanation where necessary. Some elements may not be available or appropriate for your area.

INSTRUCTIONAL DATA ELEMENTS (use table next page)

- 5 year Enrollment History (registrations); Future trends
- Course Sections Offered
- Credits
- Student FTE
- Faculty FTE (Contracted and Part-Time Credit)
- Student FTE/Faculty FTE ratio
- Revenue per FTE
- Course Completion Rates
- Course Success Rates
- Capacity Analysis (% of full classes)
- Cost per FTE; comparison data when available and appropriate
    - Direct CPF (faculty salary and OPE plus apportioned costs for manager, classified and M&S)
    - Direct Faculty CPF (faculty salary & OPE only)
- Student enrollment in required courses (essential courses required for degree/certificate)
- Employment Department Data (for CT programs, see www.qualityinfo.org)
    - Availability of jobs
    - Wages
    - Job Placement

Note: Use data from 2009 -10 to help you understand your unit's performance, accomplishments and areas that need attention (use data from prior years if those earlier data help you see trends or problems or opportunities). The data elements should help identify goals/initiatives in Section III.

Mathematics Division (Including Engineering Course of Study)	**2005-2006**	**2006-2007**	**2007-2008**	**2008-2009**	**2009-2010**
Enrollment (registrations)					
Math Courses	8,323	8,350	8,459	10,216	13,568
Engineering Courses					190
Total	**8,323**	**8,350**	**8,459**	**10,216**	**13,758**
Course Sections Offered					
Math Courses	349	338	325	361	473
Engineering Courses					9
Total	**349**	**338**	**325**	**361**	**482**
Student Credits					
Math Courses	34,191	34,625	35,147	42,520	56,312
Engineering Courses					658
Total	**34,191**	**34,625**	**35,147**	**42,520**	**56,970**
Student FTE no CN	845	855	863	1,048	1,395
Student FTE w/CN	917	935	974	1,171	1,522
Faculty FTE (all PT & FT)		27.7	25.0	26.6	33.8
Student FTE/Faculty FTE ratio		30.9	34.5	39.4	41.3
Student FTE/Contracted FTE (w/TOs)					96.8
Revenue/FTE		$5,795	$5,493	$5,240	$4,844
Course Completion Rates:					
***Completion (%)**	90.5	91.3	90.7	91.4	92
***Success (%)**	78.3	79.2	76.5	76.3	76.5
Capacity Analysis:					
(% of full courses)	84	87	94	98.7	99.8

Cost per FTE (CPF): ***Direct Faculty CPF (Faculty salary & OPE only)** ***Direct CPF** (faculty salary and OPE plus apportioned costs for manager, classified and M&S)				$1,894 $2,319	$1,909 $2,269
Student Enrollment (in required courses) **(Essential courses required for degree/cert.)**					
Employment Data **(For CT programs)** ***Availability of jobs** ***Wages** ***Job Placement**					

1. **Enrollment** in math courses has increased 63% over the past five years, from 8,323 in 2005/06 to 13,568 in 2009/10. The yearly increases were relatively small for the first three years. The last two years have shown sharp increases – 1,757 additional registrations from 2007/08 to 2008/09 and 3,352 additional registrations from 2008/09 to 2009/10. This last increase of 3,352 is largely due to increased registration for MTH 020, 060, 065, 095 and 111. See Table 1 below.

Table 1: Highest Math Course Registration Increases from 2008/09 to 2009/10

MTH	Increase in # Registrations from 2008/09 to 2009/10	Percent Increase in # Registrations from 2008/09 to 2009/10
020	600	46.3%
060	604	46.6%
065	499	71.3%
095	608	28.6%
111	411	33.3%

The division hired two Teach Only instructors and an additional fourteen Part-Time Instructors to staff the additional courses sections which were primarily under 100-level. It is also worth noting the growth in registrations for a number of our other courses from 2008/09 to 2009/10 shows that a variety of math areas are seeing high growth. See Table 2 below.

Table 2: Increase and Percent Increase in Math Registrations By Course

MTH	Increase in # Registrations from 2008/09 to 2009/10	Percent Increase in # Registrations from 2008/09 to 2009/10
025	78	49.7%
076	62	60.2%
086	14	63.6%
112	61	25.8%
211	17	26.2%
212	15	23.4%
231	18	33.3%
233	5	31.3%
241	39	21.0%
243	48	13.8%
252	28	22.4%
261	10	35.7%

The question of whether the math division can accommodate further increases in enrollment is a concern. The addition of about 33 sections per term in 2009/10 is beyond sustainable in terms of classroom and office space, the part-time to full-time instructor ratio, MRC space, and MRC staffing. There are plans to pilot MTH 095 and MTH 111 in hybrid format during the 2010/11 school year. This particular format, if successful, would enable us to offer double the number of MTH 095 and MTH 111 courses in the current classroom space. However, the need for office space, a testing center to accommodate math testing, full time faculty (to maintain curriculum and mentor part-time faculty), and MRC staffing all contribute to a reality of constraints to any further growth at this time.

2. The math division **fill rate** for Fall Term 2009 through Spring Term 2010 is at a five year high of about 99.9%. Math courses with fill rates of 100% or more in this time period include the following: ENGR 115, 199, 211, and 221; and MTH 020, 052, 060, 065, 070, 076, 095, 097, 112, 231, 241, 243, and 261. The median fill rate for the math courses was about 97%, with 25% of the rates falling above103.9% and a maximum rate of 133.6%. For the engineering courses, the median fill rate is 100%, with 25% of the rates falling above 113.9% and a maximum rate of 119.2%. These numbers for both math and engineering suggest that we must expand our staffing and possibly adjust our classroom and office space needs in order to accommodate any further enrollment growth. As mentioned above, our hybrid course pilots for MTH 095 and MTH 111 may lead to more efficient use of space. However, this growth is contingent upon providing high student success, and the ability of instructors to devote time to hybrid and online course creation. If the division goes down a path of offering more hybrid and/or online course sections, we will need to look at new ways to schedule courses, as well as providing online tutoring, and accommodations for testers.

3. **Student FTE** is up 63% from 2006/07 to 2009/10. Over these same years, **student FTE to faculty FTE** ratio has increased 33.7% from 2005/06 to 2009/10. This is in line with our increased fill rates. We have certainly grown to accommodate student need at this

difficult economic time in both our increased numbers of sections and increased fill rates. However, the growth within our division has been exclusively to staff sections and provide increased MRC staffing. If the enrollment levels hold and/or increase into the near future, the need to fortify our full-time numbers will be critical to maintaining and/or improving progression and completion numbers which are directly impacted by the non-instructional work of our full-time instructors. Over the past few years, the number of students enrolled in MRC self-paced courses has increased. In Fall of 2007, there were about 68 students, compared with 99 in Fall of 2008 and 130 in Fall of 2009. As this course format is not a great fit for every student, we want to keep this enrollment numbers proportional to other enrollments.

4. Our 2009/10 **completion and success rates** respectively are 92% and 76.5%. These are not dramatically different from those over the past four years. The success rates in past few years, however, are lower than in 2005/06 and 2006/07 when they were at 78.3% and 79.2% respectively. In looking at the success rates by course, we see that the developmental courses for which the success rate is below the overall rate include the following: MTH 020, 052, 060, 065, and 095. As of Fall 2010, we are offering a Math Fast Lane learning community course of MTH 020 linked to CG 100 (College Success) that we believe will be helpful to students taking MTH 020 and progressing to MTH 060 and beyond. This is something we would like to grow. There is budding interest among a number of faculty who teach developmental courses often, related to the On Course curriculum and Math Fast Lane. The portion of the math placement test, placing students into MTH 060, 065 and 070 has been modified with the intention of better placing students. We expect to see increased completion and success rates in these three classes in 2010/11 as a result. Among the 100- and 200-level courses, we see that MTH 231, 241, 242, 253, and 255 success rates are below the overall rate of 76.5%. In fall term 2010, calculus course leads met to examine the content of MTH 251, 252 and 253. As a result of these meetings, some shifting of content out of MTH 253 and into MTH 252 was agreed to. We believe this will lead to improved success in MTH 253. There is also a need in all course areas to pursue work in course and program assessment going forward.

5. The **direct faculty cost per FTE** has remained nearly level from 2008/09 to 2009/10. The value went from $1,894/FTE to $1,909/FTE. The **direct cost per FTE which includes apportioned costs for manager, classified and M&S** declined slightly from $2,319/FTE in 2008/09 to $2,269/FTE in 2009/10. This is owing to a number of things: Efficient use of supplies; the combination of hiring more part-time instructors and adding additional sections; and a high fill rate for sections offered. While this is a positive result financially speaking, there is a need to strike balance between low cost per FTE and the need to maintain/improve student progression and completion. The division looks forward to a time when the full-time faculty pool is in sync with non-instructional needs.

Overall, 2009/10 was a year when the math division as part of the greater college pulled together to meet community need for math classes and tutoring services. As we begin the 2010/11 school year, our focus is on striking that balance between providing these services and maintaining quality.