

2006–2007 Program Review Update
Mathematics and Statistics
Yuba College

The Mathematics Department

November 30, 2006

Date of next program review: 2008–2009

1. Based upon the data provided, briefly explain the current status of the program.

- Marysville campus
 - Lecture rooms: 11.
 - Faculty offices: 5 for faculty assigned f-t to teaching math and stats; 3 for f-t faculty with partial load assignments in math.
 - Room 847 computer lab is used for stats with 30 computers and licenses for stats software.
 - Room 700 Hard Math Cafe is used for drop-in math tutoring; 5 computers are available for student use in the adjoining Room 701 (MESA).
- Clear Lake campus
 - Lecture classrooms: 2.
 - Faculty offices: One for faculty assigned f-t to teaching math and stats; 1 for f-t faculty with partial load assignments in math and stats.
 - Room 400 business lab has a bank of 30 computers and licenses for stats software.
- Woodland campus
 - Lecture classrooms: 7.
 - Faculty offices: 2 for faculty assigned f-t to teaching math and stats; 1 for f-t faculty with partial load assignments in math.
 - Room 701 has a bank of 30 computers and licenses for stats software. Room 701 is an English/math computer lab.
- Beale AFB center
 - Lecture classrooms: 2.
 - Faculty offices: None; no f-t faculty assigned to the center.

2. Explain significant changes in the program since the last program review or annual update.

- Marysville campus

The following were reported in last year's program review update, but have not yet been addressed. One f-t faculty with partial load in math (D. Richter) was lost due to her passing; 1 f-t faculty with partial load in math (J. Brown) has been reassigned to the Woodland campus; 1 f-t faculty with partial load in math (S. Klein) is on reduced work load.
- Woodland campus

One f-t faculty (H. Souki) was hired to replace the vacated position (A. Damoose). One f-t faculty (T. Duncan) went to 80% reduced workload for 2006–07 and will be at 60% in 2007–08.
- All campuses
 - The CCC Board of Governors unanimously approved a change in the Title 5 regulation for the associate's degree math competency requirement to “a mathematics course at the level of the course typically known as intermediate algebra, either intermediate algebra or another mathematics course at the same level, with the same rigor and with elementary algebra as a prerequisite, approved locally” with a system implementation date for students entering a CCC in Fall, 2009.

Prior to this the YC Curriculum Committee, and succeeding responsible bodies, had approved a change in the YC associate's degree math competency requirement to “(1) any Yuba Community College District mathematics or statistics course that has Math 50 as a prerequisite or (2) any higher level Yuba Community College District mathematics or statistics course” with an implementation date for students entering YC in Fall, 2006.

- A new course, Math 58, Quantitative Analysis, that meets the YC associate’s degree math competency requirement, but that does not meet the intermediate algebra prerequisite for a transferable math or stats course, was developed. Math 58 will be offered at the Marysville campus for the first time in Spring 2007, and may be offered at the other campuses in the future.
Currently, three non-transferable math courses meet the associate’s degree math competency requirement: Math 51, Math 52, and Math 58. Other courses may be developed in the future.
- Briefly explain significant changes expected during the upcoming year.
Marysville campus
 - Expected retirement of 1 f-t faculty with partial load assignment in math (engineering/math).
 - The passage of Bond Measure J by voters in November should result either in the construction of a new building for the math, engineering, drafting, computer science, MESA, and Hard Math Cafe programs, or in a major renovation of Building 700 or other suitable facility or facilities for the mentioned programs. There is an acute need for modern classrooms, labs, a meeting/conference room, and larger faculty offices (f-t and adjunct), as well as larger facilities for the Hard Math Cafe and the MESA Center. In particular, the current facilities for the Hard Math Cafe (Room 700) and the MESA Center (Room 701) are woefully small, and this has resulted in hundreds of students who would have generated FTES to turn away.
- Briefly identify the current program needs in each of the following areas:
 - Curriculum and Program Directions
 - * Increase course units for Math 50 and Math 52 from 4 units to 5 units.
 - * Set reasonable class cap sizes on math and stats courses.
 - * Fund student grading help for f-t faculty at an appropriate level, at least to reflect changes in the minimum wage over the last 50 years.
 - * Make tutoring available for day and evening students throughout the day, in the evenings, and on weekends at all campuses.
 - * Investigate the use of computer or calculator technology in math courses.
 - Staffing
 - * Marysville campus
 - There is a need to replace 1 f-t faculty for math (to replace two f-t faculty with partial load assignments in math: J. Brown and S. Klein). This need is made more urgent with the unfortunate passing of 1 f-t faculty with a partial load assignment in math (D. Richter).
 - There is a need to hire at least one new f-t faculty for math in the near future.
 - * Woodland campus
 - There is a need to hire 1 f-t faculty for math soon; there will be a need to replace 1 retiring f-t faculty (T. Duncan) by 2008–09.
 - There is a need to explore funding to staff a drop-in math lab when the new LRC is open because the LRC will have a room that will be designated as a writing/math lab for drop-in help.
 - * Clear Lake campus
 - There is a need to hire one or two adjunct faculty for math so that course offerings may be expanded.
 - * All campuses
 - There is a need to provide at least 20% release time or a commensurate stipend for each of three math coordinators.

- There is a need to provide release time for the department chair to perform the duties of a chair.
- Equipment
 - * Marysville campus

Room 1902 from where the ITV courses are broadcast needs better equipment for math lectures. For example, the writing tablet currently provided is inadequate for presenting examples that require many steps because of the tablet's small dimensions. What is needed is a large white board mounted on the wall as one would find in a regular classroom. As another example, handwriting on the tablet often appears to be washed out in the videos that are streamed over the Internet. What may be needed is the proper camera or lighting equipment to ensure that all handwriting is legible if we are truly offering these courses as Internet streaming videos. As a third example, students communicating with an instructor (asking or answering questions, for instance) often cannot be heard during the live broadcast or on the VHS or Internet-streamed videos. What is needed is better audio equipment so that all students, whether in class or out of class, may participate fully in a course.

The Distance Education Program should provide any required equipment.
 - * All campuses
 - Purchase math software. (Matlab, Maple, Mathematica, and Geometer's Sketchpad are examples.)
 - Obtain "open source" math software. (Octave, Maxima, and GeoGebra are examples.)
 - Upgrade faculty computers to handle better the latest math and stats software.
- Facilities
 - * Marysville campus
 - Construct a new building to house modern classrooms, labs, the Hard Math Cafe, the MESA Center, conference/meeting room, and faculty offices (f-t and adjunct) for mathematics, engineering, drafting, and computer science. In particular, the current facilities for the Hard Math Cafe (Room 700) and the MESA Center (Room 701) are woefully small, resulting in hundreds of students who would generate FTES turning away. Voter approval of Bond Measure J should fund this.
 - Replace the remaining malfunctioning HVAC units in Bldg 700 faculty offices.
 - Replace white boards in classrooms and labs.
 - * Woodland campus
 - There will be a need for an IA for the Math/Writing Center when it opens in Summer, 2007.
 - Need more computer lab access.
 - * Clear Lake campus

Need a room for faculty to host drop-in math help (similar to the Hard Math Cafe on the Marysville campus).
- What progress has been made on recommendations from the last program review and/or annual update?
 - * Marysville campus

None.
 - * Woodland campus
 - One f-t faculty was hired (H. Souki).

- A dedicated Math/Writing Center will be located in the new LRC that will open in Summer, 2007.
- * Clear Lake campus
 - There is now some tutoring available at a number of different times of the day throughout the week, but still not available all day, every day.
 - There is a computer lab for statistics.

Program Review Annual Update Data

Program: Mathematics

Year: 2005-06

Annual	2005-06	
	Math	Stats
Total WSCH	11,289.60	1181.10
Annual CO FTEF	4.87	0.47
Annual EP/NC FTEF	5.21	0.49
Annual Total FTEF	10.08	0.96
Average WSCH per total FTEF	562.60	616.87
FTES	376.32	39.37

Note: This data sheet is to be completed using Yuba College/Clear Lake Campus/Outreach Operations or Woodland Community College/Outreach Operations data from the YCCD Fall 2005-Spring 2006 Instructor Load/FTEF/WSCH/FTES book from the Office of Educational Services (See Tanna Thomas at Yuba College, Bldg. 300, (530) 741-6987). This data sheet is to be included with the Academic Program Review Annual Update Report.)