

# Executive Summary

## Yuba College

### Mathematics and Statistics

**Program Review Committee Members:** Roger Davidson  
Catherine Heaton  
Sarah Kovacs  
Michael Papin  
John Steverson  
Lauren Syda  
John Thoo  
Kirk Wardlaw

**Dean of Program Area:** Earl Bloor

### Program Description and Current Status

The program spans three campuses (Marysville, Clear Lake and Beale AFB) with a total of 15 lecture rooms, 8 faculty offices, 2 computer laboratories (1 is shared) for statistics, and the Hard Math Café (Marysville campus) for drop-in math tutoring. Full-time faculty has a net increase of one since the last program review with the retirement of one faculty member and the hiring of two others at Marysville. The mathematics offerings continue to evolve with the addition of Math 58 and Math 50A/B as new courses and additions in new sections and locations of many other courses that are in high demand. The faculty are very dedicated, often teaching additional courses to help satisfy demand, and all faculty enjoy a high level of collaboration and professional camaraderie across campuses. Graduating students reflect this in their consistent “Way To Go” award nominations of the department and faculty over the years.

### Program Description and Current Status (select items from document)

#### **Curriculum and Program Direction**

- **Strengths**
  - The program currently offers courses that meet appropriate standards for both transferring students and the Associate in Science Degree.
  - Courses continue to be developed, and existing courses are reviewed annually to ensure they remain current and appropriately scheduled.
- **Areas for Improvement/Future Direction**
  - The number of offered sections of required mathematics and statistics needs to be expanded although there are limited rooms available at times needed by students.
  - A stronger line of communication and collaboration must be developed between the mathematics and counseling departments in order to better serve our students.
  - Student grading funding must be increased.
  - The use of technology in the classroom continues to be investigated and adopted where beneficial.

## Staffing

- **Strengths**
  - Our faculty has a diverse collection of mathematical backgrounds and training which creates a richer educational environment for our students.
  - Our faculty is actively involved in the college community as well as in professional mathematics societies and activities.
- **Areas for Improvement/Future Direction**
  - Another full-time faculty member is needed and a larger pool of adjunct faculty would provide greater flexibility in course scheduling.
  - There is a need to increase the availability of quality mathematics tutoring.

## Equipment

- **Strengths**
  - Software licenses were purchased to support increased Stats 1 enrollment.
  - The Building 800 remodel has added many classroom upgrades.
- **Areas for Improvement/Future Direction**
  - Additional classroom and online technologies are to be investigated.
  - Software license management is needed to support Stats 1 enrollment.
  - A WiFi network is needed at the Clear Lake campus.

## Facilities

- **Strengths**
  - The Building 800 remodel has improved several classrooms used for mathematics instruction at the Marysville campus.
- **Areas for Improvement/Future Direction**
  - Lack of adequate facilities is now limiting opportunities to increase course offerings at times that will accommodate student needs.
  - Limited space in the Hard Math Café has capped the amount of tutoring and FTES generated by this resource for our students although research by Institutional Effectiveness shows a 9.1% increase in success rate for students using the Hard Math Café.

## Recommendations/Specific Actions (select items from document)

- Request that a new building or major renovation of Building 700 on the Marysville campus be undertaken for the math, engineering, drafting, computer science, MESA, and Hard Math Café programs.
  - Earl Bloor to contact Measure J Planning to determine feasibility and alternatives.
- Investigate the use of Basic Skills Initiative project monies to increase student retention and success rates.
  - Math department to contact the BSI Project Team and coordinate appropriately.
- Investigate hiring additional full-time faculty for the Marysville campus.
  - Funding has been secured and announcement has been published with a scheduled implementation timeline for Fall 2008.
- Investigate new classroom technologies for mathematics instruction.
  - Sarah Kovacs will initiate a pilot to investigate technologies for Math 21 and Math 7, and Roger Davidson will pilot the use of WileyPlus for Math 3 in 2008.