Assessment Plan

Yuba Community College District

YC - Mathematics & Statistics Program Recommendations

YC - Mathematics & Statistics Program Recommendations

Program Description: Mathematics
Year of Review: 2011-2012
Type of Review: Self-Study (4-year review)
Executive Summary: The Math Department is crumbling.

No, not because of declining academic standards or personal integrity or personal responsibility or work ethic or camaraderie or anything good like that---these are as strong and intact as ever.

The Math Department is crumbling because of its declining ability to offer students the attention they need and deserve.

Why?

Because we do not have enough full-time faculty members at Yuba College to serve the number of students here.

Our first priority, therefore, is to hire at least two (2) full-time math faculty members at Yuba College.

Yet, despite the shortage of staff, the Math Department (i) continues to offer a variety of math classes for students; (ii) continues to support the MESA program; the Engineering, Mathematics, and Physics Award scholarship; the Hard Math Cafe; and the College Success Center as examples; (iii) continues to be active in the college community, with Math Department faculty members on the Academic Senate (president); the Curriculum Committee; the Basic Skills Initiative Committee; the Faculty Staffing Committee; the Sabbatical Leave Committee; and the Flex Committee (coordinator) as examples; and (iv) continues to be active in state and national professional organizations, such as the California Mathematics Council, Community Colleges (CMC3) and the Mathematical Association of America (MAA), by attending conferences as an example.

But there is no denying that the Math Department needs to have presently a total of eight (8) full-time faculty members to meet student needs and to carry out our professional obligations.

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Future Goals and Program Direction: High Priority:

o At YC, hire at least two (2) full-time math faculty members.

o At YC/CLC, schedule the fall semester math common final period to a day other than the second Friday of December.

o At YC/CLC, review the Math 58 course outline and offer the course in Spring 2013.

o At YC/CLC, revise course outlines for Math 1A, 1B, and 2A to be aligned with the C-ID descriptors for C-ID Math 211, 212, and 230, respectively.

o At YC/CLC, review the content of Math 110, 111, 50, and 52 with an eye toward providing different pathways for students to progress through Math 52 as swiftly as possible.

o At YC, upgrade existing classrooms or make available existing classrooms or construct new classrooms that would be suitable for our teaching math today.

Medium Priority:

o At CLC, hire one (1) full- time math faculty member.

o At YC/CLC, assess SLOs for a course every term that a course is offered after the initial assessment.

o At YC/CLC, provide at least 20% release time for a full-time faculty member to assume responsibilities of a Math Department chair or coordinator.

o At YC, provide suitable equipment for delivering math courses as DE-ITV courses that originate from YC.

o At CLC, a room is needed at the CLC for faculty members and student tutors to host drop-in math help (similar to the Hard Math Cafe Annex at YC).

o At YC, provide math faculty members with larger offices that would allow the faculty members to help students better.

o At YC, provide an office for math adjunct faculty members to work and to meet with students to provide private counseling or to provide office-hour help to individuals or small-groups.

o At YC, provide adjacent large rooms that are suitably designed and equipped for the Hard Math Cafe and the MESA Center at YC.

o At YC, provide additional computers to mathematics and statistics students in the Hard Math Cafe Annex.

o At YC/CLC, assess whether we should allow students who are entering directly from high school to place into a transfer-level math course, and which, using the EAP in lieu of the college's placement test.

Low Priority:

o At YC/CLC, develop SLOs in a way that would permit them to be used by local high schools to align their expectations with those of our math courses.

Recommendation: Staffing request (YC)

Hire at least two (2) full-time math faculty members for Yuba College.

Year(s) Requested: 2011-2012
Request Date: 10/07/2011
Recommendation Priority: 3. High Priority
Supporting Evidence: Catherine Heaton retired at the end of Spring 2011. In addition, 1) Roger Davidson has been reassigned permanently 50% to the Engineering Department effective Fall 2011; 2) Lauren Syda has indicated that she will retire at the end of Fall 2012, but that she will be effectively retired at the end of Spring 2012 because she will be using her load-banked units to take a load-banking leave in Fall 2012. Together, the retirements and permanent reassignment reduce our FTEF by 2.5.

For Spring 2012, there are currently 3 unstaffed sections, and we have not received any new applications for adjunct employment and very likely will not receive any soon. And if the requested full-time position is not filled, we can expect a need to find new adjunct faculty to staff the 1 FTEF course load, or else cancel those sections; furthermore, because all single-section courses (singletons) are staffed by full-time faculty, and we typically do not cancel singletons, the 1 FTEF course load that would be canceled would almost totally consist of the developmental and remedial math courses (Math 52 and below). These sections are always wait listed, and cancelation of these sections would surely delay the progress of students toward their educational goals.

Nearly half of mathematics students are taught by adjunct instructors. In the Fall 2011 semester about 29 of the 45 sections of the highly enrolled developmental and college level course were taught by adjunct (Math 52 and below, including 50A/B and 52A/B, but not the online sections). Qualified adjunct instructors (particularly those qualified to teach statistics and higher-level courses) are very difficult to find. Few potential adjunct math instructors reside in the local community, and those who do not apparently tend to be drawn to teach at the Los Rios colleges and Sierra College. As more evidence of our plight, we note that there were 11 unstaffed math sections (Math 52 and below) for Fall 2011 that we were unable to fill in Spring 2011 nor Summer 2011 until very nearly the end. During that time, we pursued every avenue to identify and hire adjunct faculty to staff the sections (HR advertised widely; math departments at other colleges were contacted; full-time faculty used their peer networks; current adjunct faculty helped to recruit), and it was only through these heroic efforts by the math faculty and MESH dean that all but 2 of the sections were staffed by the week before the start of the semester; unfortunately, and for the first time, 2 sections had to be canceled in the fortnight prior to the start of the semester because they could not be staffed. Furthermore, among the 9 that were eventually staffed, several were staffed by currently employed adjunct after special permission had been obtained for them to teach over the ordinary unit limit.

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**
Hire at least two (2) full-time math faculty. **Type:** Staffing - Faculty **Related Documents:** Mathematics and Statistics 2011.pdf	Salary and benefits.	Timeline: Fall 2011 to spring 2012. Hired faculty members to begin work in fall 2012. Responsible party: Math Department stool will submit the requests to the MESH Division dean in fall 2011, who will then forward the requests to the faculty staffing committee. Subsequently responsible for action: Faculty staffing committee; college president; board of trustees.	Yes

Recommendation: Revitalize Math 58

Review the Math 58 course outline. Offer the course in Spring 2013.

Year(s) Requested: 2011-2012
Request Date: 11/18/2011
Recommendation Priority: 3. High Priority
Supporting Evidence: In 2006 the associate's degree math competency requirement was changed to

1. Passing with a "C" or better, any mathematics or statistics course that has Math 50 as a prerequisite; or
2. Any higher level mathematics or statistics course.

In fall 2011 fifteen students completed Math 51, of which about 2/3 took the course to satisfy the associate's degree math competency requirement. This indicates that there are fewer students remaining who, through catalog rights, would be grandfathered through the previous lesser requirements. More students may therefore want an alternative to Math 52 to meet the math competency requirement for the associate's degree.

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**
Revise the Math 58 course outline and submit the revision to the college curriculum committee in spring 2012, so that the course may be offered in spring 2013. **Type:** Curriculum/SLO	Unknown.	Timeline: Spring 2012. Responsible party: Math Department stool.	Yes

Recommendation: Fall semester math common final period

Schedule the fall semester math common final period to a day other than the second Friday of December.

Year(s) Requested: 2011-2012
Request Date: 11/18/2011
Recommendation Priority: 3. High Priority
Supporting Evidence: The CMC3 annual fall conference is set to begin the second Friday of December for the foreseeable future; it used to begin on the first Friday in December. Our fall common final exam also seems to fall on the second Friday in December. This has and will continue to impact both adjunct and f-t math faculty who want to attend the conference. This is the largest conference devoted to Northern California community college math faculty, and it is a unique opportunity for two-year college math faculty from across Northern California to stay up-do-date with their profession, to learn in what other college math departments are engaging, and to network.

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**
Communicate the need to the the college vice-president (VPASS). **Type:** Curriculum/SLO	Unknown.	Timeline: Spring 2012. Responsible party: Math Department stool. Subsequently responsible for action: College vice-president.	Yes

Recommendation: C-ID course numbering

Revise course outlines for Math 1A, 1B, and 2A to be aligned with the C-ID descriptors for C-ID Math 211, 212, and 230, respectively. After these have been approved by the state chancellor's office, then decide when to update or revise other courses to align them with their respective C-ID descriptors.

Year(s) Requested: 2011-2012

Recommendation Priority: 3. High Priority

Supporting Evidence: Presently none of the outlines align with any of the C-ID course outlines that have already been developed.

Course Identification Numbering System:
http://www.c-id.net

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**
Involve interested math faculty members to review and revise the course outlines for Math 1A, 1B, and 2A to align them with the C-ID descriptors for those courses. New outlines should be submitted to the curriculum committee in fall 2012 to be effective fall 2013. **Type:** Curriculum/SLO	Unknown.	Timeline: Fall 2012. Responsible party: Math Department stool. Subsequently responsible for action: College curriculum committee and college vice-president for submission to and approval by the state chancellor's office.	Yes

Recommendation: Review pathway to Math 52

Review the content of Math 110, 111, 50, and 52 with an eye toward providing different pathways for students to progress through Math 52 as swiftly as possible. Possibilities include removing duplication of material; offering condensed-term courses; offering self-paced courses; restructuring the four courses completely.

Year(s) Requested: 2011-2012

Request Date: 11/18/2011

Recommendation Priority: 3. High Priority

Supporting Evidence: In a review of students who were enrolled from fall 2000 to spring 2003, and who were tracked until spring 2009, it was found that (i) of all the students who started in Math 110, about 55% completed Math 110, about 28% completed Math 111, about 14% completed Math 50, about 6% completed an associate-level math course (AL: Math 51, 52, or 58), and about 1% completed a transfer-level math course (TL); (ii) of all the students who started in Math 111, about 29% completed Math 50, about 11% completed an AL, and about 3% completed a TL; of all the students who started in Math 50, about 24% completed an AL, and about 6% completed a TL; (iv) of all the students who started in an AL, about 11% completed a TL. See the related document "Basic Skills Student Success and Retention" for more information.

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**
Initiate discussion in the district math department. Stay on top of state funding issues. Stay abreast of AMATYC's initiatives. Research similar changes at other community colleges.	Unknown.	Timeline: Fall 2014. Responsible party: Math Department stool.	Yes

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**

Type:
Curriculum/SLO

Related Documents:
Basic Skills Student Success and Retention
2011 Annual High School Report

Recommendation: Modern classrooms (YC)

Upgrade existing classrooms or make available existing classrooms or construct new classrooms that would be suitable for our teaching math today. This includes better (larger) student desks that would provide students with a greater working area, as well as provide instructors the flexibility to present lectures, conduct small group activities, &c.; wide writing spaces for instruction (several blackboards or whiteboards, or both); flexible projection systems; and Internet access.

Year(s) Requested: 2011-2012
Request Date: 10/14/2011
Recommendation Priority: 3. High Priority
Supporting Evidence: There is an acute need for modern classrooms. Presently many math classes are taught in temporary classrooms (the "swing space": M-3003 and M-3004) because there are not enough available permanent classrooms for math. Math classes are also taught in classrooms (M-607 and M-713) that do not allow the classes to enroll to cap. Many math courses are now taught in classrooms that do not include at least better (larger) student desks that would provide students with a greater working area, as well as provide instructors the flexibility to present lectures, conduct small group activities, &c.; wide writing spaces for instruction (several blackboards or whiteboards, or both); flexible projection systems; and Internet access.

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**
Lobby for the college to upgrade existing classrooms or make available existing classrooms or construct new classrooms that would be suitable for our teaching math today. This includes better (larger) student desks that would provide students with a greater working area, as well as provide instructors the flexibility to present lectures, conduct small group activities, &c.; wide writing spaces for instruction (several blackboards or whiteboards, or both); flexible projection systems; and Internet access. **Type:** Facilities	Unknown.	Timeline: Fall 2012 Responsible party: The Math Department stool will communicate with the MESH Division dean and college vice-president (VPASS). Subsequently responsible for action: Division dean and college vice-president.	Yes

Recommendation: Staffing recommendation (CLC)

Hire one (1) full-time math faculty member for the Clear Lake Campus.

Year(s) Requested: 2011-2012
Request Date: 10/14/2011
Recommendation Priority: 2. Medium Priority
Supporting Evidence: At present there is one full-time math faculty member at the Clear Lake Campus. Due to its location it is very difficult to find adjunct math faculty who meet the minimum qualifications for mathematics in the Clear Lake area. This is the reason the adjunct FTEF (EP/NC/etc.) numbers are so low at CLC, and in fact most of that (EP/NC/etc.) is due to EP. Because of this the campus can only offer one section in most of the developmental courses and one section of a transfer level course (usually Statistics). As a result, it is challenging for students to access the math courses they need in order to make progress in a timely fashion - either because a course is full, or the only time it is offered conflicts with another course they need. When there is only one section offered for the developmental math classes, they fill up and are waitlisted. When a second section has been added, there are plenty of students for each section. The best solution is to hire another full-time math faculty member at the Clear Lake Campus so that course offerings can be expanded and students will have the options they need to make progress toward their goals.

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**
Hire one (1) full-time math faculty member. **Type:** Staffing - Faculty	Salary plus benefits	Timeline: As soon as financially possible. Responsible party: Math Department stool or full-time faculty member at CLC will submit a request to the CLC campus dean as soon as it appears that this is financially possible, who would then forward the request to the faculty staffing committee. Subsequently responsible for action: Faculty staffing committee; campus dean; college president; board of trustees.	Yes

Recommendation: SLOs I

Assess SLOs for a course every term that a course is offered after the initial assessment.

Year(s) Requested: 2011-2012
Recommendation Priority: 2. Medium Priority
Supporting Evidence: SLOs and SLO assessments are required for accreditation by ACCJC/WASC.

ACCJC/WASC
<http://www.accjc.org>

Applying ACCJC Guidelines to SLO/Assessment: 2012 Proficiency into Practice
<http://www.accjc.org/wp-content/uploads/2011/01/Examples-and-Resources-Guide_Applying-ACCJC-Guidelines.pdf>

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**
SLOs for the course were or will be assessed for the first time during the following semesters. SLOs for a course will be assessed every term that a course is offered after the initial assessment. By semester ---------- 1B ..... Su 10 21 ..... Su 10 2A ..... F 10 50 ..... F 10 3 ..... S 11 9 ..... S 11 52 ..... S 11 1A ..... F 11 15 ..... F 11 50A ..... F 11 50B ..... F 11 51 ..... F 11 2B ..... S 12 16 ..... S 12 52A ..... S 12 52B ..... S 12	Unknown.	Timeline: Ongoing. Responsible Party: Math department stool.	Yes

Plans of Action			
Plan of Action	**Budgetary Impact**	**Timeline/Responsible Party**	**Active**

7 ..... F 12
10 ..... F 12
111 ..... F 12
Stat 1 ... F 12
25 ..... S 13
58 ..... S 13
110 ..... S 13
110A ..... S 13
110B ..... S 13
110C ..... S 13

By course

1A ..... F 11
1B ..... Su 10
2A ..... F 10
2B ..... S 12
3 ..... S 11
7 ..... F 12
9 ..... S 11
10 ..... F 12
15 ..... F 11
16 ..... S 12
21 ..... Su 10
25 ..... S 13
50 ..... F 10
50A ..... F 11
50B ..... F 11
51 ..... F 11
52 ..... S 11
52A ..... S 12
52B ..... S 12
58 ..... S 13
110 ..... S 13
110A ..... S 13
110B ..... S 13
110C ..... S 13
111 ..... F 12
Stat 1 ... F 12

Type:
Curriculum/SLO

Recommendation: Department chair or coordinator

Provide at least 20% release time for a full-time faculty member to assume responsibilities of a Math Department chair or coordinator.

Year(s) Requested: 2011-2012
Request Date: 10/14/2011
Recommendation Priority: 2. Medium Priority
Supporting Evidence: There is a need for one person to have an overall awareness of the issues that impact the Math Department from both within and without the college and district.

There has been a large increase in the number of math adjunct faculty members since the last program review that requires an increase in the coordination of schedules, expectations, &c.

YC and WCC offer a common curriculum. There are district-wide common final exams in Math 111, 50, and 52 (prealgebra, elementary algebra, and intermediate algebra). YC offers an AS degree in mathematics and has submitted to the state chancellor's office an application to offer an AS-T degree in mathematics as well. There is a need to work with local high schools to smooth their students' transition into taking math courses at YC. There is a need to maintain communication with 4-year colleges and universities to which our students transfer, notably

with UC Davis, CSU Chico, CSU Sacramento, and U. of the Pacific, to ensure that our students are adequately prepared.

There are also many other things for which a Math Department chair or coordinator would be responsible that have not been written here. But these have been written that you may come to believe that there is indeed a need for a full-time faculty member to be provided at least 20% release time to assume the responsibilities of a Math Department chair or coordinator.

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
Request that a full-time faculty member be provided at least 20% release time to assume responsibilities of a Math Department chair or coordinator. **Type:** Staffing - Faculty	At least 0.2 FTEF.	Timeline: Fall 2012. Responsible party: The full-time faculty member who is acting as a department chair or coordinator will investigate the creation of a Math Department Coordinator position through YCFA, as well as monitor whether any action is taken by "higher ups" upon their review of this program review.	Yes

Recommendation: DE-ITV equipment (YC)

Provide suitable equipment for delivering math courses as DE-ITV courses that originate from YC.

Year(s) Requested: 2011-2012
Request Date: 10/14/2011
Recommendation Priority: 2. Medium Priority
Supporting Evidence: Math has traditionally been best taught on wide writing spaces and this in good part continues to be so today. Presently DE-ITV provides only a paper tablet or computer graphics tablet that measures about 22 inches diagonally.

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
Monitor any renovation of the DE-ITV origination facility. **Type:** Equipment/Technology	Unknown.	Timeline: Fall 2012. Responsible party: The Math Department stool will monitor any renovation of the DE-ITV origination facility.	Yes

Recommendation: Room for drop-in help (CLC)

A room is needed at the CLC for faculty members and student tutors to host drop-in math help (similar to the Hard Math Cafe Annex at YC).

Year(s) Requested: 2011-2012
Request Date: 10/14/2011
Recommendation Priority: 2. Medium Priority
Supporting Evidence: Presently there is no dedicated room for faculty members and student tutors to host drop-in math help.

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
The full-time faculty member at CLC will communicate the need to the CLC campus dean. The faculty member will also search for an existing facility or new facility that would be appropriate to be used for drop-in help. **Type:** Facilities	Unknown.	Timeline: Fall 2012. Responsible party: Full-time faculty member at CLC and CLC campus dean.	Yes

Recommendation: Larger faculty offices (YC)

Provide math faculty members with larger offices that would allow the faculty members to help students better. For example, math faculty offices should have the space to provide private counseling or to provide office-hour help to individuals or small-groups; offices should also have the space to install a blackboard or whiteboard that is at least 6 feet wide, for math has traditionally been best taught on wide writing spaces and in good part continues to be so today.

Year(s) Requested: 2011-2012
Request Date: 10/14/2011
Recommendation Priority: 2. Medium Priority
Supporting Evidence: Current math faculty offices do not have the room for the faculty members to meet more than one student at a time, if that many at all, to provide private counseling or to provide office-hour help to individuals or small-groups. And the current offices do not have the space to install a blackboard or whiteboard that is at least 6 feet wide. (Math has traditionally been best taught on wide writing spaces and in good part continues to be so today, so having a blackboard or whiteboard is an essential need that has never been met.)

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
Communicate the need to the MESH Division dean and the college vice-president (VPASS). The department stool will also search for existing facilities or new facilities that would fill the need. Tentatively, the former nursing faculty and program offices in Building 800 seem to be appropriate. Unfortunately, the offices will be used as "swing space" during the library building renovation (2012--2014). **Type:** Facilities	Unknown.	Timeline: Fall 2012. Responsible party: Math Department stool. Subsequently responsible for action: Division dean and college vice-president.	Yes

Recommendation: Office for math adjunct faculty (YC)

Provide an office for math adjunct faculty members to work and to meet with students to provide private counseling or to provide office-hour help to individuals or small-groups. The room should have the space for at least a large blackboard or whiteboard, at least two desks and chairs for the faculty members and students, and Internet access.

Year(s) Requested: 2011-2012
Request Date: 10/14/2011
Recommendation Priority: 2. Medium Priority
Supporting Evidence: Presently there is no room at all for math adjunct faculty members to work and to meet with students. Many of the math courses offered are taught by adjunct faculty members, and so many students are served by adjunct faculty members. Most of our adjunct travel here from outside the Yuba-Sutter area, and it would be very helpful for them to have a place to meet students privately, as well as a place to work in between classes and to leave their belongings in between classes.

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
Communicate the need to the MESH Division dean and the college vice-president (VPASS). The department stool will also search for existing facilities or new facilities that would fill the need. **Type:** Facilities	Unknown.	Timeline: Fall 2012. Responsible party: Department stool. Subsequently responsible for action: Division dean and college vice-president.	Yes

Recommendation: Room for Hard Math Cafe and MESA Center (YC)

Provide adjacent large rooms that are suitably designed and equipped for the Hard Math Cafe and the MESA Center at YC.

Year(s) Requested: 2011-2012
Request Date: 10/14/2011
Recommendation Priority: 2. Medium Priority
Supporting Evidence: The Hard Math Cafe currently occupies M-700 and the MESA Center occupies M-701 (adjoining). Recently, the Math Department was provided the use of M-702 (that is about equal in size to M-700 and M-701 together) for

the Hard Math Cafe Annex. This has alleviated somewhat the crowding problem that students and faculty members had experienced for years in M-700 and M-701; however, there is a need to consolidate the rooms to serve the students better. Historically, adjacent rooms for the HMC and MESA center have provided for a symbiotic relation between the two programs: MESA tutors provide additional tutoring for math students and often serve as role models for the math students; and the HMC provides a pool of potential recruits to the MESA program. The presence of discipline faculty to MESA students because they hold office hours in the HMC has also been a big plus.

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
Communicate the need to the MESH Division dean and the college vice-president (VPASS). Also work together with the MESA director to identify suitable facilities. **Type:** Facilities	Unknown.	Timeline: Fall 2013. Responsible party: Math Department stool. Subsequently responsible for action: College vice-president.	Yes

Recommendation: Increase computer access

Provide additional computers to mathematics and statistics students in the Hard Math Cafe Annex.

Year(s) Requested: 2011-2012

Request Date: 10/14/2011

Recommendation Priority: 2. Medium Priority

Supporting Evidence: Presently mathematics and statistics students share the use of the MESH Division computer lab, M-847, with other students in the division.

All students in Stat 1 need to use computers for Minitab exercises, and we expect to offer more sections of Stat 1 in the future.

Many Math 50 and 52 instructors (elementary algebra and intermediate algebra) require their students to use the web-based MyMathLab instructional software, and we may expect more instructors to do the same in the future.

We may expect students in other math courses such as Math 1A, 1B, 2A, 2B, and 3 (the calculus sequence, differential equations, and linear algebra)---and perhaps the other transferable math courses---to be required to use a computer algebra system or numerical computation software for exercises in the future.

And there may be more courses that require Internet access for instruction in the future in ways that we may not anticipate now.

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
Communicate the need to the MESH Division dean and the college vice-president (VPASS). **Type:** Equipment/Technology	Unknown.	Timeline: Fall 2012. Responsible party: Math Department stool. Subsequently responsible for action: College vice-president.	Yes

Recommendation: EAP (Early Assessment Program)

Assess whether we should allow students who are entering directly from high school to place into a transfer-level math course, and which, using the EAP in lieu of the college's placement test.

Year(s) Requested: 2011-2012

Recommendation Priority: 2. Medium Priority

Supporting Evidence: The California State University already accepts the EAP in place of the ELM that it administers to incoming students. California community colleges have been asked to act similarly, and several community colleges have already done so.

California State University EAP:
http://www.calstate.edu/eap/

California Community Colleges EAP:
http://www.cccco.edu/Default.aspx?tabid=1610

California Community Colleges Accepting Early Assessment Program (EAP) Results:
http://www.cccco.edu/ChancellorsOffice/Divisions/StudentServicesandSpecialPrograms/EarlyAssessmentProgram/CommunityCollegeEAPParticipants/tabid/1746/Default.aspx

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
Discuss as a department, including full-time math faculty members at WCC and CCOF, the merits of the EAP and what direction we should take. **Type:** Curriculum/SLO	Unknown.	Timeline: Fall 2012. Responsible party: Math Department stool.	Yes

Recommendation: SLOs II

Develop SLOs in a way that would permit them to be used by local high schools to align their expectations with those of our math courses.

Recommendation Priority: 1. Low Priority

Supporting Evidence: Presently a goodly proportion of students who enter directly from high school are testing (placement test) into Math 52 and below (intermediate algebra and below). Many of these are students who have taken courses beyond the second year of algebra (intermediate algebra) in high school. For example, between January 31, 2011, and January 9, 2012, 303 of 747 students (~40%) entering from h.s. who completed Algebra 1 or above in h.s. (including 10 who completed trig or precalulus and 1 who completed calculus) and took the placement test at YC placed into Math 111 or below. See the related document "2011 Annual High School Report" for further results.

Plans of Action

Plan of Action	Budgetary Impact	Timeline/Responsible Party	Active
Set up a timetable to develop the list of SLOs for those math courses that students who enter Yuba College from high school would typically take first. These courses may include Math 52 and below, Math 21, and Math 7. Communicate with math department representatives from as many of the local high schools as possible to ensure that the SLOs would help them to prepare their students adequately for matriculation to Yuba College, so that the students would not fall backward on their math sequence upon entering here. **Type:** Curriculum/SLO **Related Documents:** 2011 Placement of students entering from high school	Unknown.	Timeline: Set up a timetable by Fall 2013. Responsible Party: Math department stool.	Yes