## I. Team Members

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<tr>
<th>Name</th>
<th>Member Type</th>
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<th>Contact Phone</th>
<th>Responsible for what part</th>
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<tbody>
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<td>415-457-8811 x 7397</td>
<td>whole program review</td>
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## II. Program Review Committee

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<th>Name</th>
<th>Committee (Chairs)</th>
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<tr>
<td>Chris Schultz</td>
<td>Curriculum Committee Chair</td>
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<td>Blaze Woodlief</td>
<td>Educational Planning Committee</td>
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<tr>
<td>V-Anne Chernock</td>
<td>Facilities Committee Co-Chairs</td>
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<td>Yolanda Bellisimo and Erik Dunmire</td>
<td>Planning and Resource Allocation Committee Co-Chair/Academic Senate President</td>
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<td>Nick Chang</td>
<td>Planning and Resource Allocation Committee Co-Chair/Instructional Equipment Committee Chair</td>
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<td>Sara McKinnon and Becky Brown</td>
<td>Program Review Committee Chair and SLO Coordinators</td>
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<td>Chris Schulz</td>
<td>Student Access and Success Committee Chair</td>
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<td>Michael Irvine</td>
<td>Tech Committee Chair</td>
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## III. Vice President of Academic Affairs

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<td>Nick Chang</td>
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## IV. Board of Trustees President

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<td>Eva Long</td>
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Program Overview—Introduction
ELND-2009

Instructions: Use this form to quickly outline your program at College of Marin. Briefly answer each of the questions and use bullet points whenever possible. Provide any attachments that substantiate or expand on the questions below.

I. Program Definition
Outline the unique qualities that define the importance of your program.

Program Definition

Unique traits of the program

Access to two beautiful college campuses, in a very scenic environment in environmentally conscious Marin County with a population that is constantly looking for education opportunities.

The population that the program serves is diverse and includes highly educated and motivated people.

The College is committed to regularly update the curriculum to reflect current economic and social environments in Marin County.

The current Dean of Career Education and the President of College of Marin have infused significant funding to the program to revitalize it. This Spring our classes have full enrolment.

The faculty in the program is highly trained and motivated and focused on student learning. Because of its location in an area that values landscapes, gardens and farming, the program has access to a wide variety of instructors who practice their careers in those areas.

The program has facilities that includes greenhouses and farm at the Indian Valley campus dedicated to support the learning activities of the students.

The program has strong institutional partners, such as the Master Gardeners Program of the University of California and the Conservation Corps North Bay, Marin water districts and many other cooperating institutions such as the Salmon Protection and Watershed Network, Spawn, and the California Native Plant Society.

The Mission and Goals of the program align with the College Mission and Goals and we recognize that the program like any dynamic organization that responds to community needs constant improvement to adjust to community needs.
The program is committed to integrate sustainability concepts in its curriculum.

The program strives to maintain and updated curriculum that reflects the discipline and economic conditions and cooperate with other College of Marin Departments for the following: a) to prepare for transfer to four -year schools and universities b) for workforce education c) basic sills improvements; d) intellectual and physical development for lifelong learning; and cultural enrichment.

The College has created a center for Water Management and Technology Education Center, WaMTEC. Partners include Marin Municipal Water District, the College of Marin, the County of Marin, North Marin Water District, Joint Venture Marin and the California Landscape Contractors Association. This center was created as a result of a faculty driven initiative. F. Agudelo-Silva and strongly supported by the Dean Nanda Schorske, Chairman Ronald Palmer and President Frances White. This Center if properly funded and with defined policies and plans can be used as a core to further develop the program. Water management is a crucial issue in Marin County.

II. Program Purpose

Pathway:
Career Tech. Ed.

Briefly describe how your program fits into the pathways you have chosen.

PRIMARY GOAL: Career/Work Training: To train people to work in a wide scope of plant-related activities for aesthetic, environmental and economic benefits. For example: to design, establish and maintain gardens, landscapes and farms for pleasure, for food, economic or environmental benefits.

OTHER ROLES OF THE PROGRAM- Other goals of the program address the other Pathways of College of Marin: Basic skills, Cultural Enrichment, Life-long learning and transfer. For the transfer pathway the program provides classes for students who want to pursue a more advanced degree in a plant-related field in a four year school. For example, Landscape Architecture, Environmental Sciences, wildlife management, botany, environmental resource management, natural history, agronomy, viticulture.

The primary and Other Goals of the program provide opportunities to a wide diverse range of students who are interested in a wide variety of aspects related to plants. For example taking care of indoor or outdoor plants, having access to plants for cut flowers, growing herbs for cooking or herbal remedies, plant history and folklore.
Briefly outline what students are served in your program.

III. Students Served

Because the special demographics of Marin County, we serve an extremely wide variety of students divided in these categories:

a) English speaking people with good basic skills in languages and mathematics with high school education, undergraduate and or graduate degrees. For example a lawyer who wants to take care of plants for relaxation or as a new career, a business person who wants to switch to a career related to plants and the outdoors, people who have been displaced from their jobs because of the current economic crisis and want to find an alternative source of employment in careers that are perceived to benefit from the current interest in the is considered green economy.

b) English speaking people with poor basic skills in languages and mathematics. These people want to learn more about plants for relaxation, or to find a job in plant related industries.

c) Non-English speaking people with inadequate basic skills in languages and mathematics. This is a potential good source of students because culturally many of them have cultural roots in plant related industries and want to get a job in a plant related occupation. This is a particularly challenging group to serve because of their inadequate English and mathematical skills.

I believe that this group can be a significant source of new students for the college if we provide the mechanisms to retain them in the program and remedy the language and mathematics limitations. Perhaps the program could participate in the Basic Skill initiatives at the college to attract non-English speaking students to the program.

d) Non-English speaking with good basic skills in languages and mathematics with undergraduate and or graduate degrees. These students want to take classes for relaxation or to find new careers in plant related industries.

Most of our students, according, to the Resources for Program Review, are classified, in percentages, as follows: white: 66.7, Hispanic 14.8, African American and Asian 5.6 respectively, American Indian 1.9 and other or non-reported 5.6.

Females outnumber males; 64.8 % compared to 35.2 %.

I believe that we could increase enrolment if we had systems to provide remedial classes in English and math for all the students enrolled in the Program and provide internship opportunities for the students to become familiar with the green industry.

IV. Program History

Briefly outline the recent history of your program.

IV. Program History

The program is small but energetically and positively emerging from a period of decline that
should be considered within its historical context.

The full time faculty fully assigned to the program for many years retired in May 25, 2001. By this time the facilities of the program were very deficient and needed improvement. The greenhouse, shade-house and orchards needed maintenance. The irrigation systems and the greenhouse control system were defective. The equipment available for teaching needed improvement: there were not enough power drills, power saws, drill presses, power circular saws, scales, equipment such as pH meters, sieves for soil studies, incubators to teach soil sciences and plant propagation classes, no microscopes or prepared slides to teach insect or plant pathology classes, growth chambers for plant growth studies.

Many factors contributed to the shortcoming in the facilities: Most of the maintenance was done by the faculty assigned to the program and his students; this was not appropriate because of lack of time; it is not possible for faculty to teach and do facilities maintenance. The main job of the faculty is to teach and support students. Facility maintenance requires dedicated professionals whose main job is maintenance; faculty and students should not do maintenance also because liability issues related to conducting repairs such as water lines, electricity to run irrigation valves.

When the full time faculty assigned to the program retired in 2001, the Dean of Career Education at the time had a thorough consultation with a wide variety of people in Marin County related to the gardening and landscape industry to determine the future of the program. Groups consulted were the Department's Advisory Board, and other Departments at the college: Biology and Physical Education. The conclusion was that the Department should be kept and revitalized to reflect current state of the art in the field and to develop joint curriculum with the Biology and Physical Education Departments.

During the time that the Dean went through the process to determine the future of the program, I was part of the Advisory Board of the Department and part time instructor in the program and supported the idea to keep the Department open at least on a temporary basis until it could be properly reviewed and funded. On August 8, 2001, the Dean hired me as coordinator of the program, and on August 13 she hired another instructor Quin Ellis to start teaching part time in the program to keep the Department in operation and keep offering classes. To provide some maintenance for the facilities, she hired an hourly worker dedicated to perform minimum maintenance of the greenhouse, orchard and shade house and the extensive, although neglected, teaching plant collection.

The remedial measures taken by the Dean were successful because the program was not eliminated which would have been very negative for the College in light of the strong interest in Marin county for gardening, landscaping, urban agriculture, food systems and conservation. The program continued to function in a limited way because of the limited resources allocated to the program. In 2004 there was an important development for the Program: The College made a long term commitment to strengthen the program based on recommendations from the Career Education Dean, a market study contracted to assess the need of the program in the College and recommendations from the Department's Advisory Board, in which I participated, and consultations with other Departments in the College. The consensus was that the Department
should continue because it played an important role providing educational services in the County and clearly contributed to fulfill the college Mission and Goals. It was determined that to start the process to restructure the program it was necessary to have a full time faculty member partially assigned to the program and develop a pool of part time qualified instructors. It was also determined that the College would address the following matters that are crucial for the success of the program: coordination of the program by full time faculty specialized in a plant-related discipline, increase the pool of part time faculty, renew the curriculum, increase inter-departmental cooperation, promote the creation of remedial programs to address the English and mathematics limitations of Spanish speaking people who could enroll in the program and improvement and better maintenance of facilities such as greenhouse, shade-house, construction and irrigation shop, landscape design laboratory, land for open field demonstrations, laboratories with microscopes, equipment and slide collections to teach classes related to insects and plant diseases, more outreach and marketing.

To implement the above recommendations, the College created a joint faculty position in Biology and Environmental Landscaping in 2004 and in January 2005 I was hired full time and jointly assigned to the Biology and Environmental Landscaping Programs. Because of the importance of direct coordination of the program by faculty with knowledge in the Environmental Landscaping and horticulture fields, I was assigned two units to coordinate the program but after one year of my hiring the coordination units were removed. This affected the improvement of the program because I did not have enough time to promote the program, coordinate maintenance and in some cases do small maintenance activities in irrigation, in addition to fulfilling my teaching assignments.

The program was based at the Kentfield Campus until 2007. That year in response to community requests and with the intent to serve the northern part of the county, the program was moved to the Indian Valley Campus, IVC. This move was gradual and we started to offer irrigation classes, Introductory Landscaping and construction classes there. In addition we kept offering some classes at the Kentfield campus. This was done to serve student population in the southern part of the state who would not attend classes at IVC because of logistic reasons and also because of lack of facilities at IVC. This is understandable considering that we were are in a transition phase. We continued to expand our activities to the Indian Valley Campus, IVC and keep some presence offering one class at the Kentfield campus. Since the program moved to IVC we have offered one class at Kentfield every semester and I recommend that we keep some presence at the Kentfield campus to serve people in the Southern part of the county.

There have been important developments for the program and they offer a good opportunity to revitalize the program. In July 2007, The College created a center for Water Management and Technology Education Center, WaMTEC. Partners include Marin Municipal Water District, the College of Marin, the County of Marin, North Marin Water District, Joint Venture Marin and the California Landscape Contractors Association. This center was created as a result of a faculty driven initiative. F. Agudelo-Silva and strongly supported by the Dean Nanda Schorske, Chairman Ronald Palmer and President Frances White.
The Indian Valley Organic Farm & Garden was created in 2007 to train students in careers related to the green industry and fostering countywide agricultural literacy and environmental sustainability.

As part of the revitalization program we have a construction shop, new equipment such as power saws, equipment and dissecting microscopes.

An additional proof of the quality of our program is the award that we won at the San Francisco Flower and Garden Show in March 2007. This award was for a Sustainable Landscape that we designed and built. We were the only community College from the California that exhibited a landscape. The project was an inter-departmental cooperation between the Environmental Landscaping and Biology Departments and community organizations such as Salmon Protection and Watershed Networks, SPAWNUSA, the Marin Water District and The Marin Conservation Corps. The success in this project is evidence of the quality of our current program and the potential for excellence.

A fundamental part of the strategy for the renewal of the program has been the support from Dean Nanda Schorske, Chairman Ron Palmer, President Fran White and cooperation between the Department and other College Departments. Cooperation with the Biology Department has been crucial because of the overlap of some disciplines taught in both departments. For example, plant related classes such as plant identification and plant diversity, soils, food and agriculture, environmental and ecology classes.

Our current Dean Ms. Nanda Schorske in cooperation with faculty continues to revitalize the program. She has obtained four grants for approximately $450,000 dollars to support the program re-orienting it to fit landscaping and gardening in the context of urban sustainable and organic farming. The program also is oriented to fit into the strategy of 2, plus 2, plus 2. That is to serve students who participate in academic activities that fit two years of high school, two years of community college and two years of a four year university.

As we emerge from times when the program was in decline, it is important to consider the enrolment statistics for the period Fall 2004 to Fall 2009. The lowest total number of students enrolled per semester was 87 in Spring 2007, it was high as 162 in Spring 2008 and was 169 in the Fall 2009. Clearly the program is recovering.

Attachments:
List and briefly describe any attachments
Five Pathways
A description of how you serve students in the five pathways as described in the Educational Master Plan.
ELND-2009

I. Please refer to the table of estimates of how many students are in each pathway for your program/discipline over the past four years.

1. Basic Skills
Students on the Basic Skills pathway seek to improve day-to-day functioning, enhance job performance, enter new careers, and/or acquire pre-collegiate fundamental skills in order to successfully complete college level courses. The Basic Skills pathway includes English as a Second Language courses offered in both credit and non-credit divisions as well as courses in developmental mathematics and English as well as basic skills courses in computers and Library.

Our program serves students in this pathway: Some students

2. Career and Technical Education
Students on the Career and Technical Education pathway pursue knowledge, technical and skill training necessary for career placement, career advancement and career changes or for creative endeavors that require technical skills. Their educational goals are either an associate degree or certificate. For some degrees/ certificates, such as Nursing, the course of study is defined by external professional regulations or licensing criteria.

Our program serves students in this pathway: To a great extent/ a majority of the students

3. Cultural Enrichment
Students on the Cultural Enrichment pathway focus on acquiring and expanding aesthetic abilities. Students broaden their intellectual and artistic skills through participation in creative opportunities including exhibitions, performances, or publishing work.

Our program serves students in this pathway: A good proportion of the students, but not a clear majority

4. Lifelong Learning
Students on the Lifelong Learning pathway focus on intellectual and physical enrichment. Some Lifelong students may have already completed degrees and/or may be in significantly advanced positions in their careers.

Our program serves students in this pathway: Some students

5. Transfer
Students on the Transfer pathway seek successful matriculation from College of Marin to four-year institutions, universities, colleges or specialized educational institutions by completing courses that fulfill requirements for the baccalaureate degree or admission to specialized programs such as nursing. In the process of completing transfer requirements, these students may also earn an associate degree.

Our program serves students in this pathway:
Transfer GE: Some students
Transfer Major: Some students

II. What are your program’s goals for each pathway?

1. Basic Skills
Our program assists students to develop skills that address math, English and library skills in their assignments for various classes. Our classes per se are not basic skill classes but contribute to develop those skills. Based on the Pathway Analysis data in the Resource session
for this Review, 9% of our students complete Math 101 or higher and 7% complete English 120 or higher.

2. Career and Technical Education

Our program goals provide knowledge, technical and skill training necessary for careers in the gardening, landscaping or farming industries. Our program also offers specialized certificates such as QWEL certification, a certification for students who take an specialized irrigation class. Our students also can use the training acquired in our program to take certification tests in landscaping or Pest Control Advisers (PCA’s).

3. Cultural Enrichment

Our program provides our students Cultural Enrichment expanding their knowledge on history folklore and utility of plants. Work with plants in garden and landscapes leads to cultural enrichment

4. Lifelong Learning

Our program goals provides students with Lifelong Learning opportunities that lead to intellectual and physical enrichment. Many of our students have completed various educational degrees and/or may be in significantly advanced positions in their careers and want to enrich their lives by learning more about plants, gardens, landscapes and food production.

5. Transfer

Our program provides students with education opportunities on the Transfer pathway. For example some of our students transfer to four year colleges to pursue degrees in Landscape Architecture, Environmental Sciences and Botany.

III. How does your program/discipline help students meet these goals?

Our curriculum includes classes designed to provide the learning experiences to address the College five Pathways. Our Class Outlines include the learning activities to fulfill the traits for those Pathways

IV. How do you measure your success?

In my classes I pay attention to the number of students who pass the class, the grade distribution for the class and how their performance measured in various ways reflect how well they master the Student Learning Outcomes, SLO’s, included in the class outlines. My class Assignments address the SLO’s in the classes I teach. I would expect that other instructors do the same.

V. How do you make sure your students are able to get through your program in a timely fashion?

I cooperate with the Dean and Chair of the Department to develop class scheduling that allow students to complete their course work in a timely fashion; normally a student
should be able to complete the certificates offered by the program in two year or less. My strong recommendation is that we revised the three current certificates that the program currently offers since our current certificates are outdated. I propose two new certificates. One on Sustainable Farming and the other on Sustainable Design
Student Access and Success
ELND-2009

I. Access

Based on the enrollment numbers and demographic breakdown for your courses, what significant factors or barriers are influencing student access to your courses or program?

Time at which classes are offered; low pay of jobs in traditional landscaping, gardening and farming jobs, lack of internships for students, financial aid.

We should consider a good blend of class offerings between IVC and the Kentfield campuses. There is no conflict having the program based at IVC but also offering classes at Kentfield.

Comparative low pay for jobs for people who work in the traditional environmental landscaping field specially maintenance. We should create more specialized classes that lead to better paying jobs. For example rock and tile work, electricity skills applied to gardens, landscapes and farms, sustainable and organic skills applied to gardens, landscapes and farms.

Low literacy in math and English skills of students

Smaller enrolment of males, compared to females, maybe because many males already have full time jobs and do not have time to attend classes. In many cases the females that take landscaping classes are not employed full time or do not have employment outside the home. Also, females appear more interested in gardening and landscaping than males.

Except in Fall 2007, In the period Fall 2004 to Fall 2008 female enrolment has been higher than male enrolment. The exception was during the Fall of 2007; that year 40% of students were female and 60% were male. There is an increasing trend in female enrolment of females in the program. In Fall 2004, 53 of the students were female and 47 were male. In the Fall of 2008, 65% of the enrolled students were female and 35% were male.

II. Student Success

Based on the student success and retention rates breakdown for your courses, what significant factors or barriers are influencing student success in your courses or program measured by completion of course and grade earned?

Note: Success Rate is the percentage of students who received a passing grade of A, B, C, or P at the end of the semester.

Note: Retention Rate is the percentage of students retained in a class at the end of the semester. In Progress and Report Delayed grades are excluded. Cancelled classes and classes with no grades shown are excluded.
The percent students passing classes is 73% which is not very different from the percent of student who pass in other career education specialties. This percentage of passing students reflect in part the good quality of the instructors that teach our classes.

These are some barriers for student success:

a. Students have full time jobs and they can not attend all the classes.

b. Students lack basic math, English and study skills

c. Some students may be discouraged because of the program limitations on equipment and supplies to adequately deliver instruction. This situation is being gradually remedied.

Most of our students are not in what is considered a transfer track to four year universities; however some of our students go that direction and some transfer to Landscape Architecture and Environmental Sciences.

III. Student Retention

Based on the student success and retention rates breakdown for your courses, what significant factors or barriers are influencing the ability for the student to succeed at more advanced courses for which your course is a prerequisite.

The Environmental Landscaping program does not have any classes that are prerequisites for more more advanced classes. However, some of our classes such as ELND253 Irrigation, ELND157 Design and ELND201 Special Topics in Landscape Design, ELND158 Landscape Materials and Construction, ELND202 Specialized Landscape Construction, ELND 260 Landscape Estimating and Management require math and / or drawing skills. Many of the students who take those classes do not perform well in them because of weakness in math, English and drawing skills. I recommend that we consider remedial classes to address those shortcomings.

IV. Improving Student Success and Retention

What key factors would further improve your student success and retention or support your current level of success? Please check any applicable statements below and then provide additional details/explanation on your choices below.

- Access to student support services (counseling, tutoring, etc.)
- Curriculum change
- Course scheduling for students needs
- New offerings/additional sections
- Articulation for transfer or COM GE
- Recruitment/outreach
- Student/job market demand change
- Faculty availability
- Facilities & technology
Professional development

Other:

Our curriculum is outdated and needs review to reflect changes in the environmental landscaping field and economy. The three certificates that we currently offer are outdated. I propose the creation of two new certificates. One in Sustainable farming and the other on Sustainable Design.

Student success and retention can be greatly improved if we review our curriculum. In fact thanks to the effort of the Program Dean a process to review the curriculum started in December, 2009 and will be completed June 2010. The following information was provided to me by my Dean: "Through a grant funded by the TechPrep collaborative (Bay Area Careers Pathway Alliance) the College of Marin is leading the project that is anticipated not only to update the courses, but create a clearer pathway toward education and career goals. One of the outcomes of this curriculum project will be a published master calendar for the program with a revolving two year plan. In addition to assuring none of the CoM ELND classes conflicts with each other, the pattern (M, T, Th eve and Wed/Friday days) will remain consistent in the two year rotation enabling working adults to plan well in advance".

Access to student Support services (counseling, tutoring): It is important that there are counselors knowledgeable about the field of environmental landscaping and course work required to complete the certificates that the program offers. If these counselors are available, they can assist students to plan their program of study and this probably would lead to better student retention and performance.

Course scheduling for students needs: We need to have a good balance between day, evening and weekend offering of classes to service a wide range of students. In addition I recommend the development of hybrid classes that combine on-campus and online instruction.

New offerings/additional sections: We should consider adding courses in computer aided design and specialized construction such as water features, rock walls, tile and brick.

Articulation for transfer or COM GE: We need to review the articulation situation of our current courses.

Recruitment/outreach: It is necessary to increase our outreach and recruitment. An idea is to contact counselors at high schools to organize field days at the college to demonstrate career paths in environmental landscaping.

Student/job market demand change: With the current economic recession and shift to an economy that is geared to conservation of natural resources, our class offering must match those demands. Thus, the need for curriculum development.
Faculty availability: The environmental landscaping field is very diverse and addresses practical situations such as design and installation of landscapes, design and installation of hardscape and irrigation systems. Thus it is advisable to have instructors that have practical experience. It is difficult to hire those instructors because many times the better instructors are already busy with their practice. We should consider creative ways to have access to those instructors. For example we could offer internships for our students to work with established landscape professionals.

Facilities & technology: We need to acquire more equipment and supplies to teach irrigation, design, plant diseases and soils.

Professional development: It is important to provide funding and release time for faculty to update their skills and learn more about other programs to improve our program.

V. Please explain and provide additional details regarding your choices above:
Facilities Questionnaire
ELND-2009

What are the existing facilities issues that impact student access and success, or health and safety? (address any of the following: Size, location, conditions, maintenance, features, a/c, lighting, adjacencies, other.)

Size: We are using various classrooms at IVC and Kentfield and the size is adequate.

Location: The base of the program is at the IVC camps. It is advisable to continue to offer classes at Kentfield in addition to IVC.

Conditions: A laboratory that has been used at IVC to teach some of our classes needs some upgrades: vacuum set up, better seats, inbuilt equipment for audiovisual presentations, better heating system.

The program has a new greenhouse at IVC and that greenhouse should be considered in the maintainance plans of the college. This maintenance includes electrical, plumbing, irrigation system and heating and cooling. Adequate funding should be provided for that maintenance.

The program is adding a weather station from the California Integrated Management Information System, CIMIS. This facility needs maintenance and the College should make plans to provide it. This includes allocating budget for it.

Maintenance: For classroom is adequate; maintenance for the greenhouse and weather station needs to be addressed.

Needs:

A. Teaching spaces for design classes. Perhaps we can share facilities with multimedia and or Architecture

B. A soils laboratory that could be shared with the Biology Department.
1. Course Outlines of Record must be updated every 5 years to remain current for content, texts, student learning outcomes as well as for articulation purposes. Are you aware of the dates on your course outlines? If not, contact OIM to check. If you have courses that are over 5 years old, are you planning on updating them? Please list.

I am aware of the dates for course Outlines of classes I frequently teach and I have updated them in the last five years. Still I plan to consolidate some of them. For example ELND110A and B will become one, ELND120A and B will become one. I have proposed consolidation of other classes to the Dean and Chairman of the Department.

I have started a discussion the with Department Chair and the Dean regarding course consolidation and their re-numbering. I plan to continue this discuss with them during the first semester of 2010 and general process to review the whole curriculum.

2. Are you planning on changing, updating or revising and degree or certificate requirements? If so, please explain how it will improve student learning, student success and/or access.

I have proposed to the Dean and Chair of the Department the updating of our certificates. Currently we offer three certificates: Design, Maintenance and Construction and I propose to have two: one in Sustainable Farming and the other in Sustainable Design.

Our Dean Ms. Nanda Schorske has started and effort to update our curriculum. She has provided this information regarding this update.

**Curriculum Change:** A major overhaul of the ELND curriculum was launched in December, 2009 and will be completed June 2010. Through a grant funded by the TechPrep collaborative (Bay Area Careers Pathway Alliance) the College of Marin is leading the project that is anticipated not only to update the courses, but create a clearer pathway toward education and career goals. This committee agrees with Fernando that the probable direction will be to establish only 2 certificates: One in Sustainable Farming, the other in Sustainable Design.

One of the outcomes of this curriculum project will be a published master calendar for the program with a revolving two year plan. In addition to assuring none of the CoM ELND classes conflicts with each other, the pattern (M, T, Th eve and Wed/Friday days) will remain consistent in the two year rotation enabling working adults to plan well in advance.

Another outcome of this curriculum project will be a coordinated/complementary schedule establish between neighboring community colleges enabling a student who may have missed a class offered only in the spring at one campus will be able to access the same class in the fall at the other campus. This level of coordination will advance access and ability for students to move through their programs with the greatest efficiency possible.

**Student/Job Market Change:** CoM just received an grant through a local Center of
Excellence to manage a new labor market research study that will cover the counties of Marin, Sonoma and Napa. We expect that research to reveal changing trends and new occupations in this field.

Grant funds awarded through the Chancellor's Office and the CTE Community Collaborative grants will enable the ELN program to purchase all equipment needed.

3. Are you collaborating (or thinking about collaborating) with other departments to develop joint curriculum for learning communities? If so, please describe briefly and explain how it will improve student learning, student success and/or access.

My plan is to explore the possibility to develop a learning community that includes the Biology and Architecture Departments. I currently work jointly with the Biology Department to use their facilities to teach classes such as Soils (Biology 160, ELND160) and Sustainable Landscape Design (ELND100). This cooperation assists our students to achieve their learning objectives because, the Biology Department has the equipment for soils that we currently lack and also has a plant collection that I use to supplement the learning experiences for the students who take ELND100.

I plan to start discussings with the Architecture Department to assess how we can cooperate to offer a class in computer aided design. I also want to explore with Multimedia how to cooperate to use computer aided design for garden, landscape and farm design.

Student learning, success and access will be improved because the students will learn concepts related to landscaping, biology and architecture in integrated courses.

4. Do you plan to develop any new curriculum? If so, please describe briefly and explain how it will improve student learning, student success and/or access.

I want to explore the possibility to revise the class outline for ELND157, Landscape Design to offer students the opportunity to use computer aided design for their designs. I have discussed this idea with the Dean who also sees the opportunity to develop a Design class that would be rotated Santa Rosa Community College and College of Marin.

5. Do you plan to develop any new Distance Ed courses or develop Distance Ed versions of existing courses? If so, please describe briefly and explain how it will improve student learning, student success and/or access.

I want to explore with the Dean and Chair of the Department the possibility of developing hybrid classes where students do some classes on campus and other classes online. The advantage of this arrangement is that working students who have very limited time to take on-campus classes, can complete their course work without having to come to numerous on-campus meetings.

6. Do you plan to add or increase your material fees for any of your classes? If so, please list the classes and the proposed new or revised material fees for the respective classes.

At this time I do not foresee this happening.
Student Learning Outcomes
ELND-2009

Five College Learning Outcomes:

1. **Written, Oral and Visual Communication:** Communicate effectively in writing, orally and/or visually using traditional and/or modern information resources and supporting technology.

2. **Scientific and Quantitative Reasoning:** Locate, identify, collect, and organize data in order to then analyze, interpret or evaluate it using mathematical skills and/or the scientific method.

3. **Critical Thinking:** Differentiate between facts, influences, opinions, and assumptions to reach reasoned and supportable conclusions.

4. **Problem Solving:** Recognize and identify the components of a problem or issue, look at it from multiple perspectives and investigate ways to resolve it.

5. **Information Literacy:** Formulate strategies to locate, evaluate and apply information from a variety of sources - print and/or electronic.

I. Degrees and Certificates

1. What degrees and certificates does your discipline offer?

We offer an A. S. in Environmental Landscaping and three certificates: Landscape Construction and Design Specialty, Landscape Maintenance Specialty and Nursery Management. The certificates are outdated and I recommend that they are replaced as soon as possible.

2. Keeping in mind the five College Learning Outcomes above as well as what your discipline specifically requires of your graduating students, what should students be able to do when they have completed your discipline’s requirements for each degree or certificate?

I am framing this response based on my recommendation that we replace the three certificates that we currently offer by two new certificates: Sustainable farming and Sustainable Design. Previous discussions with the Dean, Chairman and members of our Advisory board indicates that this is an viable alternative. I list below a proposed list of skills that students should master when they obtain those new certificates:

**Sustainable farming:**

1. **Written, Oral and Visual Communication:** Students should be able to Communicate effectively in writing, orally and/or visually using traditional and/or modern information resources and supporting technology the various steps necessary for succesful urban farming.

2. **Scientific and Quantitative Reasoning:** Students should be able to locate, identify, collect, and organize data related to sustainable farming and analyze, interpret and evaluate them using mathematical skills to perform the various tasks necessary to establish an ecologically sound farm.

3. **Critical Thinking:** Students should be able to differentiate between facts, influences, opinions, and assumptions to reach reasoned and supportable conclusions to successfully establish a urban farm: For example, student should be able to differentiate organic from non organic pesticides and how the selection of pesticides affect farm sustainability.

4. **Problem Solving:** Students should be able to recognize and identify the components of a situation related to urban farming and look at it from multiple perspectives and
investigate ways to resolve it.

5. **Information Literacy:** Students should be able to formulate strategies to locate, evaluate and apply information from a variety of sources - print and/or electronic to successfully perform the various tasks necessary for a successful urban farm.

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**Sustainable design.**

1. **Written, Oral and Visual Communication:** Students should be able to communicate effectively in writing, orally and/or visually using traditional and/or modern information resources and supporting technology to design sustainable gardens, landscapes or urban farms.

2. **Scientific and Quantitative Reasoning:** Students should be able to locate, identify, collect, and organize data on sustainable design, analyze, interpret, and evaluate them using mathematical skills to perform the various tasks necessary to design ecologically sound gardens, landscapes or urban farms.

3. **Critical Thinking:** Students should be able to differentiate between facts, influences, opinions, and assumptions to reach reasoned and supportable conclusions to successfully design sustainable gardens, landscapes or a urban farms.

4. **Problem Solving:** Students should be able to recognize and identify the components of a situation related to sustainable design, look at it from multiple perspectives and investigate ways to resolve it.

5. **Information Literacy:** Students should be able to formulate strategies to locate, evaluate and apply information from a variety of sources - print and/or electronic to successfully perform the various tasks necessary for a successful sustainable design.

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3. **How do students in your program demonstrate that they meet each of the college-wide learning outcomes? What courses, activities, and/or projects are students required to complete that relate to each outcome?**

   **i. Written, Oral and Visual Communication**

   Each Class Outline must include specific student learning outcomes related to the course content. Students, through various assignments and evaluations demonstrate in writing, orally and visually that they have learned the specific Learning Outcomes for their classes.

   **ii. Scientific and Quantitative Reasoning**

   Each class outline must include specific student learning outcomes that include scientific and quantitative reasoning related to the course content. Students, through various assignments and evaluations demonstrate in writing, orally and visually that they have learned the specific Learning Outcomes for their classes.

   **iii. Critical Thinking**

   Each Class Outline must include specific student learning outcomes related to the course content. Students, through various assignments and evaluations demonstrate that they have developed critical skills applied to the Learning Outcomes for their classes.

   **iv. Problem Solving**

   Each Class Outline must include specific student learning outcomes related to the course content. Students, through various assignments and evaluations demonstrate that they can solve problems specifically related to the Learning Outcomes for their classes.

   **v. Information Literacy**

   Each Class Outline must include student learning outcomes related to the course content. Students, through various assignments and evaluations demonstrate that
they can formulate strategies to locate, evaluate and apply information from a variety of sources - print and/or electronic to address concepts related to the class content.

II. General Education:
1. Does your discipline offer any classes which count for general education requirements?
   No

2. Which General Education courses in your discipline address the each of the five College Learning Outcomes? Please list courses for each of the following:
   i. Written, Oral and Visual Communication
   ii. Scientific and Quantitative Reasoning
   iii. Critical Thinking
   iv. Problem Solving
   v. Information Literacy

III. Course Level Outcomes:
1. Do all of your Course Outlines of Record include Student Learning Outcomes? If not, are you revising them?
   All my Course Outlines of Record include Student Learning Outcomes

2. What percentage of faculty members in your discipline include SLOs in their course syllabi?
   I am not in a position to supervise other instructors because I do not believe that is my role. However, informally I raised the issue of student learning outcomes with other instructors when we share ideas. I believe most of the instructors in the Environmental Landscaping Department include SLO's. in their syllabi.

3. Assessment:
   i. How often do you assess these SLOs?
   Every time I teach a class, I assess my SLO's. This occurs in average every two years.

3. Assessment:
   ii. In the last two years every discipline developed SLOs specifically related to College Learning Outcome #3: Critical Thinking. Have you assessed this or any of the stated Student Learning Outcomes in your course outlines over the last year? If so, please summarize the results.
   I have found that my students have addressed the College five learning outcomes. I have found out that the most difficult SLO to achieve is objective 2. Scientific and Quantitative Reasoning: Locate, identify, collect, and organize data in order to then analyze, interpret or evaluate it using mathematical skills and/or the scientific method. I believe that a major limitation for the students is that many basic lack math and English skills.

The other SLO that student have had problems completing is the College Learning Outcome:
   4. Problem Solving: Recognize and identify the components of a problem or issue, look at it from multiple perspectives and investigate ways to resolve it.

http://programreview.marin.edu/SLOReport.jsp
I believe that a limitation for the students have been that many of them have not have opportunities to be trained in a systematic approach to problem solving.

3. Assessment:
   iii. What improvements have you made or do you plan to make in the future?

   In all the classes I teach, assign a term project related to the specific class content. The project is designed to address all the **Five College Learning Outcomes**. I give students provide students written and oral instructions how to accomplish the project. The instructions require that to complete the Assignment, students conduct activities that address each of the five college learning outcomes.

   I plan to keep refining the term project that I assign for each class to ensure that each student has the opportunity to learn the material taught and to assess their comprehension of the material based on the college learning objectives.

3. Assessment:
   iv. What do you plan to assess this year? Who will you assess? How will you assess?

   I plan to further assess the students abilities to address the college learning objectives.  

   **2. Scientific and Quantitative Reasoning:** Locate, identify, collect, and organize data in order to then analyze, interpret or evaluate it using mathematical skills and/or the scientific method.  

   **3. Critical Thinking:** Differentiate between facts, influences, opinions, and assumptions to reach reasoned and supportable conclusions and  

   **4. Problem Solving:** Recognize and identify the components of a problem or issue, look at it from multiple perspectives and investigate ways to resolve it.

   I will address that by developing specific Assignments that address those objectives and by tailoring classes to assist my students to achieve those objectives.
Instructional Equipment

This section will be filled out by faculty and reviewed by the Department Chair, the AREA Dean, the Instructional Equipment Committee, IPC and Budget. Please enter items that will be used over a period of semesters BY STUDENTS. (Note: These should be NEW items that you are requesting one time only - not ongoing or consumable. Ongoing and consumable requests go under "Other Instructional Equipment". Technology-related requests should go under "Technology Requests".

Select whether the item is less than or more than $200 each. If you are a large discipline with several areas, please include which area this item is for. Include Tax, Shipping and Handling in the total cost for each item.

I. Instructional Equipment/Materials Requirements

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support</th>
<th>Category</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>01</td>
<td>2 Classes</td>
<td>Over $200 Each</td>
<td>Environmental Landscaping</td>
</tr>
</tbody>
</table>

Description and part number for ordering:
pH meters and electrode Holder. Oakton 15W1545 and 15W 1546 respectively (from Ward's Natural Science)

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<thead>
<tr>
<th>Qty.</th>
<th>Unit Cost:</th>
<th>Tax:</th>
<th>Shipping:</th>
<th>Total:</th>
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</table>

One-time expenses: (e.g. construction, electrical, installation)

n/a

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)

Occasional minor maintenance by laboratory technician

Item to be shared with the following Department/Program: (Include any shared expenses)

Biology

Do you have space for this equipment? Yes

Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
• ‘A’ means that your discipline cannot teach your course(s) without the requested equipment.
• ‘B’ means that your course(s) would be greatly enhanced with the requested equipment.
• ‘C’ means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

A.

I have not requested these items before.

2. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)

Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

N/A
3. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

The instruction for the students will be greatly enhanced. The classes that use this equipment for instruction, such as soils, landscape ecology, organic farming, introduction to environmental landscaping can not be adequately taught without this equipment.

The Class Outlines for the classes mentioned above, include SLO's that to be fulfilled pH meters must be available.

The classes that use this equipment are necessary for the students to complete their certificates.

4. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

This equipments is needed to accomplish specific SLO's in the the Class Outlines for the classes listed above.

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

When studens take the classes for which this equipment is needed, instructors will assess how well the SLO's were achieved by the students that used this equipment.

Additional Justification for this item:

This equipment could be shared with the Biology Department to teach general biology laboratories, soils, and microbiology

I. Instructional Equipment/Materials Requirements

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<th>Priority</th>
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<th>Category</th>
<th>Discipline Area</th>
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<tbody>
<tr>
<td>02</td>
<td>2 Classes</td>
<td>Over $200 Each</td>
<td>Environmental Landcaping</td>
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</tbody>
</table>

Description and part number for ordering:
Compound microscopes with magnification ranges from 4 to 100, oil immersion objective phase and dark phase contrast.

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<th>Qty.</th>
<th>Unit Cost</th>
<th>Tax:</th>
<th>Shipping</th>
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One-time expenses: (e.g. construction, electrical, installation)

n/a

On-going Expenses: (e.g. maintenance, repairs, staffing, and/or upgrades)
Need technician that performs minor routine maintenance, such as cleaning lenses, changing light bulbs.

**Item to be shared with the following Department/Program: (Include any shared expenses)**
These microscopes could be shared with the Biology Department.

**Do you have space for this equipment?**  
Yes

**Justification for Item (See Rating Rubric)**

1. Indicate how important this item is to the life of your discipline.
   • 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   • 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   • 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

   A

2. In addition, how many times have you requested this item, but you have not received it?

   I requested these microscopes before.

3. Is this equipment required to meet Title 5 and/or Ed Code? If so, how? (Cite code)
   Is this equipment required to meet any local, state or federal Health and Safety Code? If so, how? (Cite code)

   N/A

4. How will the quality of instruction be improved for student learning and success? Is it necessary for students to succeed in a series of courses?

   This equipment is requested to teach the plant diseases class ELND210C. This class addresses microbes, such as fungi, which infect plants. This class has enrolment of over 25 students which shows its success. It is important that students be able to examine plant parts that have microbes and be able to see them. Without these microscopes students can not see microbes when I teach the plant diseases class and therefore I can not properly teach the class.

   Students will be able to learn the course content.

   The class is offered in average every other year. Enrolment for this class is approximately 25 per class, thus average number of students served per years is 13.

   This equipment is required to accommodate existing students because students who take plant diseases classes must observe microbes using the requested microscopes.
The microscopes are vital to attracting new students because students notice that we lack those microscopes and they develop a negative perception about the quality of our Program. If we acquire the equipment current students will be served and new students will be likely to take our classes.

5. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

Students should be able to achieve the SLO’s identified in the Class Outline for the plant diseases class ELND210C. Sample of those Outcomes are:

A. Describe plant pathogens.
B. Identify plant pathogens
C. Differentiate plant pathogens.
D. Analyze situations regarding diseased plants and make decisions about how to proceed to solve the problem.

6. How will these outcomes be measured for future planning? What data or evidence supports your request?

The success of the students completed the SLO’s for the class for which these microscopes are requested, will be assessed by instructors and their success most likely will be positively correlated with the students having access to the microscopes.

Additional Justification for this item:

The microscopes requested could also be shared by the Biology Department to teach a wide variety of biology classes such as general biology laboratories, microbiology and soils.
Instructional Operating Supplies
ELND-2009

I. Consumable Instructional Operating Supplies
This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, IPC and Budget.
Note: Please group requests into broad categories of items required to teach a class. Make ONE entry for each category.
Note: These are generally ongoing costs. One-time items go under Instructional Equipment.

<table>
<thead>
<tr>
<th>Priority</th>
<th>To Support:</th>
<th>Discipline Area</th>
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</thead>
<tbody>
<tr>
<td>01</td>
<td>4 Classes</td>
<td>Environmental Landscaping</td>
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</table>

Broad Category (for example in Chemistry - "Chemicals")
Books, trade journals, markers, stakes, flaggs

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
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<tr>
<td>400.0</td>
<td>100.0</td>
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<th>Type</th>
<th>How Long?</th>
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<tbody>
<tr>
<td>New</td>
<td>Ongoing/Recurring</td>
</tr>
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</table>

Item to be shared with the following Department/Program: (Include any shared expenses)
Biology

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   • 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   • 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   • 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.
In addition, how many times have you requested this item, but you have not received it?
A. Supplies to be ordered from account 12920-23201-43000-010910. These supplies have been requested in the past and we have received them.

2. Is it necessary for students to succeed in a series of courses?
   Yes, students take several courses that are interconnected and all these use the supplies requested here for instruction. Field exercises requires these supplies

3. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?
   Having these supplies will allow instructors to teach their classes well, students will have more opportunities to succeed and most likely the reputation of the program will improve and more students will register to take classes. Forty students will benefit per year.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals?
   The SLO's indicated in the Class Outlines for which these supplied will be used will be achieved.

5. How will these outcomes be measured for future planning? What data or evidence supports
your request?
Instructors will determined the role that the supplies requested played in the students' success.

I. Consumable Instructional Operating Supplies
This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, IPC and Budget.
Note: Please group requests into broad categories of items required to teach a class. Make ONE entry for each category.
Note: These are generally ongoing costs. One-time items go under Instructional Equipment.

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<tbody>
<tr>
<td>01</td>
<td>1 Classes</td>
<td>Environmental Landscaping</td>
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</tbody>
</table>

Broad Category (for example in Chemistry - "Chemicals")
alcohol, vials, twezzers, charts, sieves, glassware

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
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<tbody>
<tr>
<td>500.0</td>
<td>100.0</td>
<td>400.0</td>
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</table>

Type How Long?
Increasing Cost Ongoing/Recurring

Item to be shared with the following Department/Program: (Include any shared expenses)
Biology

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   • 'A' means that your discipline cannot teach your course(s) without the requested equipment.
   • 'B' means that your course(s) would be greatly enhanced with the requested equipment.
   • 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

In addition, how many times have you requested this item, but you have not received it?
A. From account 11100-23201-45000-010910. Some of these items have been requested in the past and have been provided.

2. Is it necessary for students to succeed in a series of courses?
Yes, they are necessary. Students who take these classes take a series of interconnected classes. The supplies requested here are important for the success of the students.

3. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?
Students will be given the opportunity to achieve the SLO's in the classes that they take. Forty students will benefit per year.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals?
The supplies requested are important for the students to achieve the SLO's of their classes. Clearly, this is crucial to the achievement of the students' goals.
5. How will these outcomes be measured for future planning? What data or evidence supports your request?
Instructors will assess the role that the supplies requested played in the students' performance.

I. Consumable Instructional Operating Supplies
This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, IPC and Budget.
Note: Please group requests into broad categories of items required to teach a class. Make ONE entry for each category.
Note: These are generally ongoing costs. One-time items go under Instructional Equipment.

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<tbody>
<tr>
<td>01</td>
<td>4 Classes</td>
<td>Environmental Landscaping</td>
</tr>
</tbody>
</table>

Broad Category (for example in Chemistry - "Chemicals")
Seeds, wood, saw blades, drill bits, shovels, pruners, saws, soil, fertilizers, nails, screws

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
</tr>
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<tbody>
<tr>
<td>1500.0</td>
<td>200.0</td>
<td>1300.0</td>
</tr>
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</table>

Type: Increasing Cost
How Long: Ongoing/Recurring

Item to be shared with the following Department/Program: (Include any shared expenses)
Biology Department

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
   - ‘A’ means that your discipline cannot teach your course(s) without the requested equipment.
   - ‘B’ means that your course(s) would be greatly enhanced with the requested equipment.
   - ‘C’ means that you would like this piece of equipment for your course(s) but can wait for a future academic year.
In addition, how many times have you requested this item, but you have not received it?
A: These supplies will be ordered from account 11100-23201-45000-010910. I have requested some of these supplies and received them.

2. Is it necessary for students to succeed in a series of courses?
Yes; all students who take classes in the Department use these supplies for various activities in their courses.

3. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?
Approximately 80 students will benefit from these supplies. The supplies are needed to offer various classes that students take. Satisfied students will promote our classes and this will attract more students.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals?
The SLO's indicated in the Class Outlines of classess for which these supplies are
5. How will these outcomes be measured for future planning? What data or evidence supports your request?

Instructors who teach the classes for which these supplies are requested will assess how the supplies assisted students to achieve their SLO’s.

I. Consumable Instructional Operating Supplies

This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, IPC and Budget.

Note: Please group requests into broad categories of items required to teach a class. Make ONE entry for each category.

Note: These are generally ongoing costs. One-time items go under Instructional Equipment.

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<tbody>
<tr>
<td>01</td>
<td>2 Classes</td>
<td>Environmental Landscaping</td>
</tr>
</tbody>
</table>

Broad Category (for example in Chemistry - "Chemicals")

Diverse plants and seeds to support lectures

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
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<tr>
<th>Type</th>
<th>How Long?</th>
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<tbody>
<tr>
<td>New</td>
<td>New/Will be Recurring</td>
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</table>

Item to be shared with the following Department/Program: (Include any shared expenses)

Justification for Item (See Rating Rubric)

1. Indicate how important this item is to the life of your discipline.
   • ‘A’ means that your discipline cannot teach your course(s) without the requested equipment.
   • ‘B’ means that your course(s) would be greatly enhanced with the requested equipment.
   • ‘C’ means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

   In addition, how many times have you requested this item, but you have not received it?
   • A.

   $300 from account 12920-23201-43000-010910.

2. Is it necessary for students to succeed in a series of courses?

   Having plants available to teach students plant identification is crucial for their success in classes.

3. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

   Students will be able to complete their SLO’s.

   The plants can benefit students from more than one class. I anticipate 40 students per year can benefit.
Is it required to accommodate existing students? Would it be vital to attracting new students?

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals?
What student learning or other outcomes are expected?:
A. Know plants that grow in different environments.
B. Explain how plants use water
C. Contrast traits of various plants

Is it important to the achievement of student goals? Yes, the SLO's of the classes I teach call for these outcomes

5. How will these outcomes be measured for future planning? What data or evidence supports your request?
How will these outcomes be measured for future planning? What data or evidence supports your request?:
I will ascertain through the various assignments that my students complete and the use of the plant material we purchase, the usefulness of the plants purchased to make adjustments if any for the new cycle of supply requisitions.

I. Consumable Instructional Operating Supplies
This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, IPC and Budget.
Note: Please group requests into broad categories of items required to teach a class.
Make ONE entry for each category.
Note: These are generally ongoing costs. One-time items go under Instructional Equipment.

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<tbody>
<tr>
<td>02</td>
<td>2 Classes</td>
<td>Environmental Landscaping</td>
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</table>

Broad Category (for example in Chemistry - "Chemicals")
Irrigation supplies such as pipe, valves, sprinklers

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<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Amount of Increase</th>
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<tbody>
<tr>
<td>200.0</td>
<td>200.0</td>
<td>0.0</td>
</tr>
</tbody>
</table>

Type: New
How Long?: Ongoing/Recurring

Item to be shared with the following Department/Program: (Include any shared expenses)
N/A

Justification for Item (See Rating Rubric)
1. Indicate how important this item is to the life of your discipline.
• ‘A’ means that your discipline cannot teach your course(s) without the requested equipment.
• 'B' means that your course(s) would be greatly enhanced with the requested equipment.
• 'C' means that you would like this piece of equipment for your course(s) but can wait for a future academic year.

In addition, how many times have you requested this item, but you have not received it?

A.

$300 from account 12920-23201-43000-010910 for assorted irrigation supplies such as pipe, valves, controllers. I have requested irrigation supplies before and I have received them.

2. Is it necessary for students to succeed in a series of courses?

Students who take irrigation classes need these supplies to achieve their SLO's in the irrigation classes.

3. How will access for students be improved? How many students (annually) will benefit from this request? Is it required to accommodate existing students? Would it be vital to attracting new students?

Students will be able to achieve the SLO’s in the irrigation classes. Approximately 25 students per year will benefit. It is vital to attract students because satisfied students promote the Program.

4. What student learning or other outcomes are expected? Is it important to the achievement of student goals?

The SLO’S specified in the irrigation classes Class Outlines will be achieved.

5. How will these outcomes be measured for future planning? What data or evidence supports your request?

Instructors who teach the irrigation class will assess how the supplies requested assisted the students to complete their SLO's
II. Miscellaneous Instructional Materials Account

This section will be filled out by faculty and reviewed by the Department Chair, the Area Dean, the Technology Committee, IPC and Budget.

Note: This is for things to help faculty teach - not necessarily used directly by students, such as supplemental materials, audio/visuals/maps, subscriptions, etc.

<table>
<thead>
<tr>
<th>Annual Cost</th>
<th>Previous Cost</th>
<th>Discipline Area</th>
</tr>
</thead>
<tbody>
<tr>
<td>200.0</td>
<td>200.0</td>
<td>Environmental Landscaping</td>
</tr>
</tbody>
</table>

What kind of things do you generally use this money for?

To pay for soil samples, subscription to trade journals

Justification for Item (See Rating Rubric)

1. Who will use these materials? How? Will it be shared with other disciplines?

The various instructors who teach classes in the Department.

2. How will these materials benefit student learning?

Soil analysis are used to teach many concepts taught in the various classes in the Department. Trade journals are needed to keep instructors current in their subject matter.
## Faculty Members

### ELND-2009

### I. Program Faculty

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Agudelo-Silva</td>
<td>Fernando</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Status:**
- Full-time, tenured Yes

**Shared W/other program(s):**
- Yes

### Summer 2009 TU  Fall 2009 TU  Spring 2010 TU  Reassigned (Total)

<table>
<thead>
<tr>
<th></th>
<th>6</th>
<th>18.5</th>
<th>18.00</th>
<th>00.000</th>
</tr>
</thead>
</table>

### Years of Service:  Specialty:
- 8  Biology and Environmental Landscape, Environmental and Health Sciences

**Leadership: List involvement in committees or other service**

- President of Facilities Planning Committee for three years until 2009. Currently member of this committee.
- Faculty Sponsor of the Land Sustainability Student Club.
- Founder and main promoter of the Biology Department Botanical Garden and Arboretum.
- Member of the Museum Committee for College of Marin.
- Founder of the Water Management and Technology Center at College of Marin.

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Buckner</td>
<td>Lisa</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Status:**
- Part-time, ETNUM No

**Shared W/other program(s):**
- No

### Summer 2009 TU  Fall 2009 TU  Spring 2010 TU  Reassigned (Total)

<table>
<thead>
<tr>
<th></th>
<th>1.5</th>
<th>1.5</th>
<th>00.000</th>
</tr>
</thead>
</table>

### Years of Service:  Specialty:
- 2  organic farming and gardening

**Leadership: List involvement in committees or other service**

- Liza assists in curriculum development and teaching of classes on organic gardening and landscaping.

### List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Burgi</td>
<td>Charlene</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Status:**
- Part-time, ETNUM No

**Shared W/other program(s):**
- No
List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
<thead>
<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Johnson</td>
<td>Rudnick</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keator</td>
<td>Glenn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swain</td>
<td>Steve</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

List of Faculty Members and Total faculty Units separately for Fall, Spring and Summer

<table>
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<tr>
<th>Last Name</th>
<th>First Name</th>
<th>MI</th>
<th>Year Retired:</th>
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<tbody>
<tr>
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</tr>
<tr>
<td>Keator</td>
<td>Glenn</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Swain</td>
<td>Steve</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Leadership: List involvement in committees or other service

Charlene plays an important role advising with matters regarding water management classes.

Ms. Johnson plays an important role in classes related to organic farming and assists in curriculum development.

Glenn assists in curriculum development.
Additional Teaching Unit Requests

II. Additional Unit requests for NEW classes or extra sections
(requests for returned units has different process).

<table>
<thead>
<tr>
<th>Specialty:</th>
<th>Units/Class</th>
<th>Number of Sections/Year</th>
<th>Existing or New Course</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section not applicable this year</td>
<td></td>
<td></td>
<td>Existing Course</td>
</tr>
</tbody>
</table>

To meet Program requirements for the following:

- [ ] Health/Safety  
- [ ] Scheduling  
- [ ] Title 5/Ed.Code  
- [ ] Waitlists

Other:

If it is for a new course, has the outline been submitted and approved by curriculum, UDWC and the Board?

Section not applicable

Justification for new units:

1. Why do you feel this is an important addition to your overall curriculum and/or number of offerings?
2. Is it or will it be required for a degree or certificate?
3. Is it a new state law requirement?
4. How will this improve access, student learning outcomes and success?
5. Do you have evidence to support the need for your request? If so, please explain and/or attach.

Shared Resources: If you have requested additional units that will be used by more than one department, please indicate here. Please indicate which disciplines and/or departments and the number of combined students/faculty or classes he/she would serve. Please indicate how it will improve access or outcomes and if it is needed for health and safety concerns or required by law.

III. FT Faculty Needs (Please fill this out ONLY if you are stating a need for new full time faculty in your area.)

1. Please indicate if there are NO FT faculty in your discipline. Please provide data regarding the length of time this discipline has been without a full time instructor.

This section is not applicable

2. Non-availability of part-time instructors in a subject area. Please provide evidence demonstrating the difficulty in finding part-time instructors to teach in the subject area.
3. RETCUM Faculty: How many FT faculty have retired in the past ten years. How many units are now taught by RETCUM faculty each year?

4. New FT Faculty: How many NEW FT faculty have been hired in past 10 years? Please list each faculty name and the year of employment. If this instructor is shared with another department, please list the equivalent FTE% for your department. Please list instructional equivalencies as necessary and if faculty member was the result of retreat rights.

5. Reduction in department TUs as a result of FT Faculty retirements or other significant causes? Please provide data that illustrates a change in teaching unit allocation as a direct result of FT faculty retirements within your department and how this may change in the coming year(s).

6. Other reasons: Have there been other causes for a reduction in units in your discipline? If so, please explain and provide evidence.

7. Changes in Student Demand: Recent or forthcoming growth as a result of added sections due to enrollment demands. Provide evidence that illustrates the need for additional faculty due to increased student demand such as numbers of sections added and/or courses with waitlist totals showing a need for additional sections. What is the % of FTEF for this increase in units? If there has been a decline in student growth, please explain why.

8. Current of forthcoming changes that illustrate the immediate need of additional FT faculty within this department. Please outline all relevant circumstances that justify the priority of a FT hire in addition to those already outlined above. Consider changes in the field, changes in the job market and population shifts.

9. Program Review Findings: Indicate what trends you identified in your last program review that support the need for full time faculty hires. Tie these to the department and college mission.

10. Other considerations: Include such information as matriculation needs, changes in student demand or community and job market needs, response to legislation, or rapid growth of the discipline.

11. Shared Resources: If you have requested FT faculty that will be used by more than one department, please indicate here. Please indicate which disciplines and/or departments and the number of combined students/faculty or classes he/she would serve. Please indicate how it will improve access or outcomes and if it is needed for health and safety concerns or required by law.
Non-Instructional Support Staff

I. Current Support Staff

List of Support Staff

<table>
<thead>
<tr>
<th>Name</th>
<th>Type</th>
<th>Purpose</th>
<th>Hours/Week</th>
<th>To support</th>
</tr>
</thead>
<tbody>
<tr>
<td>July Oyle</td>
<td>Full-Time</td>
<td>Clerical</td>
<td>20</td>
<td>4Classes</td>
</tr>
</tbody>
</table>

Leadership: List involvement in committees or other service

Ms. Oyle provides diverse administrative Assistant services to the Environmental Landscaping Department.

II. Request for additional support staff (clerical, lab tech, IS, comp tech, tutor, etc.)

<table>
<thead>
<tr>
<th>Purpose</th>
<th>Type</th>
<th>Approx. hours per week</th>
<th>To support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Other</td>
<td>Full-Time</td>
<td>40</td>
<td>Classes</td>
</tr>
</tbody>
</table>

Justification: Please address the following areas as applicable. How will it be used? How will instruction be improved for student learning and success? How will access be improved? What student learning outcomes are expected? How will the outcomes be measured? What data or evidence is supplied to support your justification?

How will be used: To support the various instructors who teach classes in the Department. The various classes offered in the department use multiple types of teaching aids. For example: plants, models of plants, insects, microbes, irrigation supplies, construction materials, tools. Other items used include microscopes, microscope slides, stains, pH meters, scales. Instructors cannot conduct their teaching well, when they have to not only teach the class content but also search for supplies and equipment for their classes and or laboratories or practices.

How will be accessed improved: The students will have a better learning experience and achieve their SLO's because the instructors can concentrate in the delivering of the content of the class.

How will the outcomes measured: Instructors would assess students' performance in their classes after a full time assistant is hired and determine if student satisfaction and student success increases.

Shared Resources: If you have requested additional staff that will be used by more than one department, please indicate here. Please indicate which disciplines and/or departments and the number of combined students/faculty or classes he/she would serve. Please indicate how it will improve access or outcomes and if it is needed for health and safety concerns or required by law.

A full time person to provide support to the various instructors could be shared with the Biology Department specially if biology classes are offered at the Indian Valley Campus.
Program Summary
ELND-2009

Instructions: after reviewing your data and reports from all other sections of your program review, use this form to briefly summarize all of the information you have provided by closing with your concluding remarks (e.g. an executive one-page summary) for your entire program review.

I. Program Excellence (Best Practices)
Please address any of the following areas:
Overall Program structure, contextualized learning/learning communities, reputation of faculty, faculty collaboration, staff, retention and success, how you maintain a supportive environment, how you address issues of diversity, any specific student learning outcomes.

Our program goals and mission are aligned with the College of Marin Mission and Goals and we strive to learn from experience and update our program, expressing our opinions and providing them to the College Management. Proof of that is this updated program review. February 10, 2010.

Overall program structure: Administratively, the program is run by the Dean and Chairman assisted by input from a partially assigned full time instructor shared with the Biology Department. The full time instructor provides significant guidance in curriculum development. The program is being revitalized; proof of that are new classes that have been created. ELND100 Introductory Design Principles for Sustainable Gardening and Landscaping and ELND139 Principles and Practices in Organic Farming and Gardening. The program has made a major commitment to a curriculum that focuses on organic and sustainability principles and water management.

Reputation of faculty: Our instructors are highly regarded in the gardening/landscaping/farming community.

How we maintain a supportive environment: We encourage group work between the students and participation of students in public discussion during class time. This allows for immediate feedback and reinforcement of their learning.

How I address issues regarding student learning outcomes: I include student learning outcomes, SLO's, in all my Class Outlines and my syllabi deliver content that fits those SLO's. My SLO's also fit the Five College Learning Outcomes:


We keep upgrading our facilities for excellence in teaching. We have a farm dedicated to organic farming at IVC and plan to purchase new microscopes.

We schedule our classes considering the needs of all the Marin County Community.
Althought the program is based at the IVC campus, we still offer classes at the Kentfield campus. I recommend that we maintain this practice to serve the various areas of the county.

Our curriculum integrates concepts of ecologically sustainability.

II. Program Resources (Responsiveness)

Briefly summarize examples of key resources required for your program to meet or exceed the college goals (as cited in this review).

Overall, that the college makes a long term comitment to support the Environmental landscaping program by assign time to faculty to proceed to an intensive effort to upgrade the curriculum and the certificates that the program offers. This is very urgent.

-Assign time for full time faculty trained in horticulture to coordinate the program. This coordinaton would include supervision of part time instructors and coordination of the support they need to successfully teach their classes.

It is crucial to expand the pool of qualified part time instructors, specially for Design and Construction. Once qualified instructors are hired is important to offer them stability in their teaching. This will lead to recognition in the community of the excelence of the program and its stability.

It is high recommended that the college make data on student performance rapidly available to instructors for them to assess the quality of their teaching and make the necessary adjustments.

We need to acquire more equipment to support classes offered. See section on Instructional equipment and Technology/software

We need to keep ugrading our teaching facilities. I recommend that we develop a laboratory to teach soils. This laboratory may be jointly used with the biology and geology departments.

I recommend that the college funds a permanent position for an assistant this is essential to deliver the instruction outlined in the class outlines and serve our students well.

III. Moving Forward Objectives (Planning)

Please summarize any data-driven coordinated planning has your department done to improve enrollment, student learning, access and success?
Based on statics for class enrolment in the program in the period Fall 2007 to Spring 2009, we have readjusted the class offering to offer those classes that attracted most students in that period. Those classes are: ELND110A and B, 100, 154A and B, 254 A and B, 210 A, B and C. Enrolment in those classes varied between 19 to 29 which are high numbers for our program. For comparison, classes as ELND 202 had five students, ELND158 had 6 students. Based on current economic trends we created an organic farming class. That class was offered for the first time on Spring 2009 and the 29 students enrolled.

IV. Assessment of 2008 Program Reviews:
1. What resources have you been granted from your previous program reviews?
2. Please assess how these resources have been used to improve access, learning outcomes and student success in your program?
3. What changes have you implemented based on previous program reviews?
4. What results have you found?

We received funds to purchase dissecting microscopes, tools for the construction laboratory and supplies for irrigation classes.

The microscopes are used to support teaching of ELND210 A, B and C and will be used to support teaching of ELND120A and B in Spring 2009. The construction and irrigation supplies have been used to support the teaching of construction, irrigation and organic gardening and farming classes.

I have made emphasis in including SLO's in all the class outlines of classes I teach. I have recommended to the Dean and Chair of the program that they encourage other instructors in the program to do the same.

I make sure that my SLO's are aligned with college of Marin five learning outcomes.

I have developed student learning assessments that reflect the SLO's for each of the classes I teach. I am recommended to the Dean and Chair of the Program that they recommend to other instructors in the program to do the same.

The majority of the students who took my classes were greatly satisfied with the instruction that they received and the great majority succeeded in my classes.

V. Fall 2009 Requests Summary:
1. Please summarize the main requests you have made in this program review in order of your priority starting with the most important one.
2. Summarize briefly why you want each one.
3. Summarize your overall rationale.

A. That College of Marin makes a long time commitment to maintain the Environmental Landscaping program. This is important because Marin County has a population very interested in aspects related to gardening, landscaping and gardening. The College must address these matters through a strong Environmental Landscaping Program.

B. That I have teaching units, 5.0, allocated to work with the Dean, Chair, and other relevant parties on the review of skills certificates and class outlines. This is crucial to the revitalization of the program.
C. Assignment of a full time assistant to support instructors. This person could be shared with the biology Department. There are too many non-instructional tasks to be performed to teach the currently scheduled classes that instructors must divert too much energy to perform those non-instructional tasks and that reduces their teaching effectiveness.

D. Expand pool of part time instructors, specially for Design, construction and plant identification. If we have good instructors for those subjects we can increase enrolment and strengthen the Program.

E. Compound microscopes to equip lab to teach plant diseases.

VI. Other concluding remarks.

Receive specific feedback about all the matters raised in this Program Review.
1. Please make any comments on the Five Pathways, Student Access and Success, Facilities, Curriculum and SLO sections.

Environmental Landscaping addresses all Five Pathways. They offer instruction to a diverse student population which includes all members of the community, some seeking careers in the industry, others seeking cultural enrichment and lifelong learning and many wanting to further their education at four year colleges and universities. The Environmental Landscaping program needs to continuously explore different ways to offer their classes. Possibilities include nights, weekends, combination of in class and online classes as well as continuing day classes. It is a challenge to calculate when to offer classes with a limited number of available units to teach per semester. Recently, enrollment trends tend to be increasing due to better scheduling and offering of classes. The Environmental Landscaping department needs to continually fine tune their course and time offering to best meet the needs of students.

The Environmental Landscaping department is in the process of revising their degree and certificate offerings. The certificates are aligned with trends in the industry and student needs. The facilities for Environmental Landscape have recently been updated and moved from the Kentfield campus to the Indian Valley campus. The modernization project working collaboratively with the Conservation Corp has developed an Organic Farm, greenhouse and shade structure at the southwest end of the Indian Valley campus. The college is in the process of refitting the old chemistry lab at the Indian Valley campus to be used as a lab facility for the Environmental Landscaping program. The construction class built several structures which include a greenhouse for the storage of exotic plants for the plant identification class. All of the courses in the Environmental Landscaping department are current and up to date. They are continuously evaluating and rewriting courses as necessary to meet the needs of the community and students.

2. Please comment on the instructional equipment requests, technology requests and other instructional materials requests sections. Please comment especially on any specific priorities without which this program cannot function.

Environmental Landscaping has a good working relationship with the Biology department. They share equipment and teaching aids so the district doesn't have to double up on equipment and teaching aids thus saving money for the district. The Environmental Landscaping program needs to acquire the necessary equipment to test
soils. Soil testing is an integral part of the entire Environmental Landscaping program. Since the Environmental Landscaping program is teaching more classes at the Indian Valley Campus, there is a need to invest money to develop a well equipped Environmental Landscaping Lab which can be shared with Biology. They will need compound microscopes and other lab equipment to perform basic biological and plant physiology labs.

3. Please comment on the faculty and staff sections.

Environmental Landscaping has one full time faculty member and a quite extensive number of highly trained part time faculty who have a wide variety of professional and technical skills. Currently the Environmental Landscaping program is offering four classes per semester. All classes are running at full capacity. Enrollment has substantially increased as a result of the move to Indian Valley campus and the attraction of the Organic Farm. Marin County has been looking for a location for a Community Organic Farm quite some time. Another draw towards Environmental Landscaping is the trend towards sustainability and native vegetation.

4. Other comments
Area Directors and Deans Comments
ELND-2009

1. Please make any comments on the Five Pathways, Student Access and Success, Facilities, Curriculum and SLO sections.

The ELND program has successfully garnered significant resources to enhance facilities, support staff development, provide staff support to facilities and embark on a comprehensive curriculum revision project.

The data available for this program review does not reflect the tripling of the enrollment in the ELND program during the last year since the program moved the base of instruction and operations to IVC and established the Indian Valley Organic Farm and Garden. Those two achievements succeeded in revitalizing the ELND program. The next necessary step in the evolution of the program is a comprehensive curriculum review and revision. Grants to support all of these developments and innovations exceed $400,000. The curriculum revision will be conducted with all CoM ELND faculty in collaboration with local secondary programs, neighboring community colleges and UC Davis.

Currently, the greatest challenge to the program is the limited units allocated for the program in spite of the growing demand. Throughout the curriculum development project, a streamlining of the certificates, opportunities to collaborate with other departments and other educational agencies and additional resource development will be considered and aggressively pursued.

2. Please comment on the instructional equipment requests, technology requests and other instructional materials requests sections. Please comment especially on any specific priorities without which this program cannot function.

$2532 has been requested to purchase the ph meters that are required for the ELND program to provide the instruction required for the skills and knowledge necessary to the ELND student.

$37,750 has been requested to purchase 15 compound microscopes. The microscopes are required to provide ELND students the opportunity to pursue the transfer path for transfer to a 4 year institution. Grant funds are being solicited to support this purchase. This cost can be reduced by 50% by matching grant funds, resulting in a reduction of this request to $18,875.

3. Please comment on the faculty and staff sections.

During the last year of program revitalization and extraordinary program growth (over 300%)! Many gifted faculty have joined the ELND program who are nationally recognized experts in their field. All faculty will be compensated for the curriculum revision project scheduled for the spring semester of 2010.

4. Please itemize expenses currently covered by external funds that may revert back to general funds.

Every year the Environmental Landscaping program expends all the general education funds allocated to the program. The expenses grow with the increasing costs of supplies and materials. In addition to the GE funds the ELND program has also spent about $4300/ year for expenses required for program operation. Those expenses were covered from $2517 in Lottery funds and $1,800 in Perkins funds. In addition, nearly $400,000 has been raised in grant funds to revitalize the ELND program. The infusion
of funding and the resulting program expansion has resulted in the revitalization of the program.

5. Other comments
The ELND program has enjoyed unprecedented expansion during the course of the last program year. That expansion is not reflected in the data included in the resource section for this program review.

Significant infusion of funds and resources—over $400K in cash, and formalized partnerships with the Conservation Corps North Bay, UC Extension and the Marin Master Gardeners—are all contributors to this exciting program development.

The next steps: The administration will continue to support curriculum revision, revenue sustainability, faculty support and student development in order to assure the momentum established for this program.