

See program review website for detailed timeline and relevant request forms:

<https://research.gwc.cccd.edu/oir/progreview/2013/index.html>

Golden West College

INSTRUCTIONAL

PROGRAM REVIEW

Spring 2013

Program Name: Biological Sciences

Division Name: Math/Science and Social Sciences

Overview of Program: The Biological Sciences program has a wide range of quality course offerings. These include lecture courses, lecture-lab combinations and an on-line hybrid course. Courses can be taken to complete majors transfer requirements (Biology AAT), general education or as a prerequisite to vocational programs such as Nursing. The department has 7 full-time faculty, 3 temporary classified staff and approximately 17-22 part-time faculty and student lab assistants to serve our students. We are particularly proud of the outstanding retention and success rates of GWC biology students – both are above 73% which is truly remarkable given the difficulty of biological science courses.

Biology and ecology courses are taught for the most part in the Math Science and Health Science buildings. The MS and HS buildings house various prep areas, faculty offices and storage facilities. They also include one large lecture room, several single and double lecture rooms and 7 different labs. Our class rooms are not only inside, however! An amazing and unique teaching area is the Golden West College Native Garden. This resource is currently maintained by an incredibly small paid staff and by the generous services of a volunteer crew. The Native Garden provides a valuable resource not only for students in several Biology/Ecology classes, but for the campus and nearby community as well.

Biological Sciences faculty serve on many campus committees and many have published laboratory manuals for use in their classes. In addition to campus duties, faculty members have also participated in the following educational and volunteer activities during the past 3 years:

Anatomy: Visiting Scientist with the New York City Medical Examiner, worked in the Anthropology and Forensic Laboratory at the University of Indianapolis, attended Mountain, Desert and Coastal Forensic Anthropology Meeting.

Majors Biology: Attended the American Society for Cell Biology Annual Conference to update current research in molecular and cell biology, textbook reviews, and participated in webinars on meiosis and mitosis, nerve signaling and DNA replication/PCR. Member of American Society for the Advancement of Science.

Microbiology: Member of American Society of Microbiology.

Non-Majors biology: Maintains connections with faculty in biology at UCI and with former employer to obtain zebrafish specimens for Science Showtime.

Ecology: Board of Directors and Science Committee of Amigos de Bolsa Chica (citizen environmental organization) and docent trainer for the Bolsa Chica Conservancy, V.P. of the local chapter of the National Audubon Society.

Physiology: Contribution to various professional journals (Integrated Physiology and Disease Mechanisms, Acupuncture Today, attended conferences aimed at working with professional and Olympic athletes.

Full and part-time faculty also take advantage of the many professional development seminars presented here on campus, including updates on new technology (such as CurricuNet, TechED and Blackboard Learn) and seminars on effective teaching strategies.

In September of each year GWC hosts Science Showtime, which is open to the general public and consistently well attended. The focus is on fifth and sixth grade students and their parents, allowing them to participate in many different activities in both the physical and life sciences. This night is an exciting time where biology instructors open their labs so students and parents can take a peek at what we do here in our lab courses. Since Science Showtime is the result of collaboration with the Rotary Club of Huntington Beach, it provides an excellent community outreach as well. A major goal is to interest young people in science as a possible career path and also to highlight the wonderful courses we teach here at Golden West College.

Each spring faculty members participate in the Science Olympiad, a competition between local and middle and high school students. For this competition instructors prepare and grade written and practical exams that test the knowledge and understanding of outstanding students from area high schools. The competition among students is fierce yet fun and awards are given to the school teams with the highest points at the end of the day.

The biology faculty continues to provide direct support (over \$15,000/year) by donating the Biology G100 Lab Manual royalties to the GWC Foundation. In turn, these funds are then available to purchase extra supplies and support items for our program as the need arises.

When the last Dean, Bonnie Roohk, retired our Math/Science Division was combined with the Business and Social Sciences Division, and Nursing was assigned to the same Division as Criminal Justice. The former MS Division office was closed and our Coordinator, Mary Wallace, moved into Humanities 108 with the Business/Social Science Coordinator, Susan Girard and the Dean. Our new Dean is now Jeff Courchaine who admittedly is “not a biologist.” This was a huge adjustment for us and has required patience and understanding as we have become part of the largest division on campus. Dept. members originally expressed concern that we were no longer supported by a manager with a life science background but Jeff has listened to our concerns and has tried hard to understand our needs. We have all rallied and worked our way through some difficult re-organizational “growing pains.”

We have also seen a complete change in classified personnel since the last Program Review. Kate Hawkins who supported us by ordering and receiving supplies, and helped with lab set-up was moved last summer to the Nursing program. Candace Brenner, IA for Math/Science for 37 years, has just retired and Holly Van Dorn, IA for microbiology, is on an extended medical leave. In their place are three temporary replacements that are doing an outstanding job of filling in until a more permanent solution is in place. Both Office Coordinators, Susan Girard and Mary Wallace, have seen an increase in their job responsibilities due to these absences and the merge of the two Divisions and have done a great job during this transition. While these changes have brought a level of new stress to our Dept., members are adjusting well and pulling together to keep our courses running as smoothly as possible.

Program Contact Information:

<u>Program Contact Name</u>	<u>Phone #</u>	<u>E-mail prefix</u>
Mary Wallace	x58990	mwallace
Susan Girard	x58790	sgirard

<u>Program Manager</u>	<u>Title</u>	<u>Salary Sched/Column</u>	<u>Phone #</u>	<u>Office Location</u>	<u>E-mail prefix</u>
Jeff Courchaine	Dean	D-32	x58790	Hum 108	jcourchaine

<u>Classified Staff</u>	<u>Title</u>	<u>Salary Sched/Column</u>	<u>Phone #</u>	<u>Office Location</u>	<u>E-mail prefix</u>
Nalani Queja - Temp. Repl. for Holly Van Dorn (Med. Leave)			x51130	MS 112	nqueja
Michael Valinluck- Temp. Repl. For Nalani Queja			x51130	MS 112	mvalinluck
Kaitlyn Bruccheri - Temp. Backfill for Candace Brenner, ret.			x51128	MS 112	kbruccheri

<u>Full-Time Faculty</u>	<u>Phone #</u>	<u>Office Location</u>	<u>E-mail</u>
Annamaria Crescimanno	x51064	MS 107	acrescimanno
Catherine (Kate) Egan	x51125	HS 115	cegan
Darla Kelly	x51121	MS 102	dkelly
MaryLynne LaMantia	x51114	MS 212	mlamantia
Stephen Miller	x52809	MS 202	smiller
Nikki Plaster	x51131	MS 107	nplaster
Travis Vail	x51117	MS 220	tvail

Current State of the Program

1. What noteworthy trends do you notice in your data tables?

Data shows continued high demand for courses in Biological Science. Fill-rates across the board are consistently over 100% and have held steady since Fall 2010 when the last PR was done. Retention and success rates are also outstanding, especially for academically challenging courses such as biology and ecology; more than 73% of our students finish biology courses with a C or better. Summer courses when available for students are equally in high demand with the same or better retention and success rates.

2. What are your analyses of the causes or reasons for those trends?

The Biological Sciences Department offers a wide range of academically relevant courses that are very popular with both major and non-major students. Non-majors can satisfy the degree or transfer a lab science requirement (Bio. G100 "Introduction to Biology" and G104 "Marine Life") while Biological Sciences majors can complete an AAT in Biology (Bio. G180 "Cell and Molecular Biology", G182 "Zoology", G183 "Botany"). In addition, courses such as G120 "Man and Disease", G210 "General Microbiology", G220 "Human Anatomy", G221, "Anatomy and Physiology" and G225 "Human Physiology" are not part of the majors pathway but are required by numerous students seeking careers in kinesiology or health care (nursing, pharmacy, physician assistants, dentistry, etc.) As the American society ages, many job openings are anticipated in health care for years to come. It is therefore expected that biology courses will continue to be in exceptionally high demand.

3. What does your program do well?

Biology Dept. members do an exemplary job of teaching very difficult classes, with stringent lab requirements, to a vast number of students each year. In recent years we have seen our class sizes grow to support campus FTE goals and as a way to accommodate as many students as possible during the budget crunch. The increase in class enrollment size threatens student/instructor interactions, the quality of instruction and continued high rates of student success. In some cases our seat count goes beyond what is desirable for optimal student learning but we have persevered to support campus goals. We teach in buildings that are over 45 years old (and just shy of complete obsolescence) with fortitude and creativity.

On a brighter note, while most of the faculty are part-time (roughly 20) as compared to full-time (7) each is valued equally and there is respect and collaboration among everyone in the Dept., including classified personnel. Members strive to remain current in their fields by attending workshops and seminars and networking with colleagues from other colleges and universities. Several faculty members also maintain ongoing relationships with people in industry to be sure our biology classes teach what the workplace demands.

4. What are the challenges to your program.

Within your program's control: Maintaining open and strong communication lines to keep up with last minute schedule and personnel changes to handle budget cutbacks (in recent semesters) and to handle anticipated LHE increases going forward. We started scheduling Dept. meetings monthly since the beginning of this Spring 2013 semester and this has been an important forum in which to share ideas and discuss strategies. In addition we rely a lot on email communications. All Dept. members must be sure to check emails on a regular basis since this is often the primary means of communication for the Dept. and the campus.

Beyond your program's control: The biggest concerns here are the lack of full-time faculty, the size of our LCF sections and the condition of the Math Science buildings. For the past several years department budgets have been inadequate to meet the instructional supply and equipment requirements of the department. Biology has been forced to use donated Foundation funds provided from the sale of Biology G100 Laboratory Manuals to meet operational needs. In the 2012-13 academic year lottery funds were allocated to the Dept. for the first time. This allocation alleviated the supply shortfall and allowed Biology to replace vital instructional supplies. However, these funds are not guaranteed and do not meet the continued demand for improved equipment, supplies and reagents necessary to teach expensive biology laboratory sections.

Our FT:PT faculty ratios are nowhere near the desired levels with resulting weakness in programs such as anatomy and physiology. With increases in non-majors biology courses set to take place to fulfill campus-wide goals we are filling sections with additional part-time faculty who are often less experienced, vested and who teach at several different schools. Our PT faculty do an admirable job but there is a lack of cohesion and general Dept. support when there are so many Adjunct faculty who are spread so thin. We also teach far too many courses as double and triple sections. It is not conducive

to student learning to pack so many students into our lecture rooms and labs – instructor/student contact time is limited, different types of testing are required (ie., Scantron tests vs. essays/short answers due to lack of time to grade excessive numbers of written exams) and in general, the quality of learning and student success diminishes. One of the greatest advantages of community colleges vs. large universities has always been direct student access and close interactions with their professors due to smaller class sizes. This is sadly becoming increasingly scarce as we move towards more “large lecture hall” classes.

In addition, the increased work load accompanied with the large class sizes limits an instructor’s ability to participate in professional development which is essential to maintain current in the ever-changing field of biology. Overall, this negatively affects the quality of education and student success.

The age and size of the Math Science buildings continue to be a growing problem. Regarding course seat counts, most biology course lectures fall into the large class category often in classrooms barely large enough to seat our students. Seats are old, small and sometimes broken. The writing surfaces are very small and make it difficult for students to take notes. The cramped classrooms make it exceedingly difficult to maintain a secure testing environment. It often falls upon the instructor to find volunteer proctors (fellow instructors or G205 students) for exams. Although the department prioritizes maintaining academic integrity in our programs we do not have the resources (classroom support staff) to adequately monitor student testing. Perhaps a campus-wide Testing Center or the addition of more Student Instructional Associates would be ways to alleviate this problem

We are next in line for a new science building once the state passes a bond measure for matching funds. Unfortunately the next bond is not due to go on the California ballot until fall 2014, meaning 6-8 years *at best* before a new building will be completed. Our classrooms, labs and stockrooms are in dire need of repair and updating. We are happy that the Administration has stepped up and air quality testing has been done by Forensic Analytical in many of our lab rooms and prep areas. The Dept. is very glad that ventilation in the anatomy lab, MS 124a, has improved greatly with the additional vents put in place and that ongoing testing is scheduled to take place this semester. But we still have a ways to go. In that same anatomy lab there is only 1 working sink out of the four in the room. This is the only sink where students can wash their hands and tools after dissecting. This is not a sanitary or efficient environment and requests for repair have not been heeded as yet. In addition, all biology lab rooms are in need of a thorough cleaning from top to bottom. Another casualty of the budget crisis has been a decrease in housekeeping personnel and it is very evident when one views the condition of our labs and classrooms (actually somewhat embarrassing). We strive to model professional behavior and want our students to take their education seriously. It is difficult to maintain a level of high professionalism when the physical facilities are in such bad shape.

In MS and HS buildings there is ongoing mold contamination in lecture rooms and the microbiology prep areas. Many of our ceiling tiles display evidence of water leaks coming from the air space between the floors; the stains are unsightly and disgusting. Plumbing leaks are the norm in our labs, with limited M&O personnel left to scramble for parts because the fixtures are so old they are no longer carried by plumbing companies. Carpets are old, torn and stained in HS 113 and 117, walls are in desperate need of new paint, baseboards are missing and chairs are broken and need repair or replacement.

While some of these issues may seem “just cosmetic,” teaching and learning in rooms in such poor condition does have a huge negative impact on concentration and morale for students and instructors alike. One of our students in Biology is a very involved person on campus: returning Student Senator, student representative for the Facility Safety and Land Development committee, Chair of the Sustainability Committee (to name just a few of his activities). He recently stated to one of our faculty that it is such a disappointment to walk from the extraordinarily beautiful campus grounds at GWC into classrooms that are “disgusting” and where “we are supposed to learn amid crowded seating, filth and broken furniture.” Students, faculty and staff alike want to be proud of their association with Golden West College but cannot due to substandard facilities. With no relief in sight, it is becoming increasingly difficult to maintain a high quality of biology instruction at GWC and we are all worried about the future of the Biology program in view of our outdated, unkempt and at times unsafe science buildings.

Another issue of grave concern regards our Classified staff. These people are essential to the operation and safety of the Biological Sciences Department. As outlined above, a recent transfer, retirement and extended medical leave have seriously affected Dept. operation. Indeed, one of our faculty with experience at Saddleback and Mira Costa states both these colleges have more lab tech supporting positions than we do here at GWC and feels strongly that we need more.

All of our Classified personnel at this time are temporary! We need immediate permanent replacement for essential positions to ensure efficiency and smooth, safe operations. Biology courses deal with potentially harmful chemicals (formalin in anatomy and zoology), pathogens (in microbiology) and equipment (ie., the autoclave) on a daily basis. We cannot have unqualified, untrained people handling items such as live bacterial cultures and cats preserved in formalin. Frankly, without strong, experienced and permanent Classified staff, our Biology lab classes will come to a grinding halt. Students and Dept. personnel will be at risk for health and safety problems if labs do not have adequate support staff.

5. What are the opportunities for your program

As course offerings are increased with the easing of the budget crisis and new emphasis on general education and transfer courses we will have the opportunity to seek new faculty, hopefully full-time in addition to part-time. There has been recent discussion of a new non-majors lecture biology course that incorporates biological concepts with food science and cooking. Such a course is planned for development by department faculty in the near future. Perhaps other biology courses can also be proposed and developed as more funding becomes available; genetics, human biology and field studies in biology are just some possible topics. The study of biology is vast and each new Dept. member will bring their unique educational background and work experience to the table. As new classified personnel come on board they will also add their ideas and bring a new perspective. It is hoped that this time of transition will enrich and enliven our conversations and our interactions, altering our Dept. positively going forward.

6. Identified areas in need of improvement

Once more, we need major improvements and updates to our facilities, more full-time Biology faculty and of immediate concern, replacement of our full-time Instructional Associates.

OSHA Inspection: Another urgent issue is the need for ongoing air quality testing in the lab rooms where dissections take place (Ms 124a and MS 113). Last Friday, 4/26/13, we were informed that OSHA cited the District after an inspection of our labs completed in October, 2012. The issue was the lack of continued ongoing testing of our dissections area. Testing completed by Forensic Analytical (retained by the District) did not find that we exceeded normal safety limits of formalin exposure so the citation was not about the levels determined. The citation was because there had not been ongoing testing of the ventilation, which is an OSHA requirement. The fine levied was \$560, paid by the District and the issue is considered abated.

After the original test results were revealed in November, 2012, Jerry Marchbank of District Health and Safety and Janet Houlihan, our Vice President responsible for facilities, assured the Biological Sciences Dept. that Forensic Analytical would return this semester to repeat air quality tests. Over the winter break, improvements in the ventilation of the anatomy lab, MS 124a, were completed that seem to be helping with the air flow. But all of us were very anxious to see what the test results would be for this spring 2013 semester.

Annamaria and Travis, our FT instructors of anatomy and zoology, respectively, informed Janet, Jeff and Jerry of the dates for their dissections this semester. In anatomy, those dates have passed and no one showed up from either Forensic Analytical or the District on any of the dates submitted for the repeat testing. The same is true for the dissection dates submitted for zoology – no one showed up and no testing was done.

This a grave concern of our Dept. because we have absolutely no control over the testing schedule, have done all we can to help the inspections proceed and our faculty, students and classified personnel are the ones potentially at risk due to excessive formalin exposure. We plan to teach two sections of anatomy lab during the summer, with classes beginning on June 17,2013. We would like to know if the improvements made to MS 124a during the winter are proving beneficial and if not, what the next steps will be.

We therefore request prompt attention from the District and Administration so that periodic air quality testing is done on a regular basis in compliance with OSHA requirements.

Program-Level Student Learning Outcomes (pSLOs) Assessed During 2010-12

Complete a separate page for each major and/or certificate you assessed.

Program Name: _____

Semester Fall Spring

Year: _____

Program Type: Transfer Major
 Certificate of Achievement
 Basic Skills Sequence
 Area of Emphasis
 Gen Ed Area

Assessed: Winter Summer

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	
Step 2	What method did you use to assess the SLO?	
Step 3	Describe the results of your assessment.	
Step 4	Describe your analysis of the data.	
Step 5	What planning and changes will or have occurred, as a result of assessment and analysis of data, to improve student learning?	

Program-Level Student Learning Outcomes (pSLOs) Assessed During 2010-12

Complete a separate page for each major and/or certificate you assessed.

Program Name: _____

Semester Fall Spring

Year: _____

Program Type: Transfer Major
 Certificate of Achievement
 Basic Skills Sequence
 Area of Emphasis
 Gen Ed Area

Assessed: Winter Summer

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	
Step 2	What method did you use to assess the SLO?	
Step 3	Describe the results of your assessment.	
Step 4	Describe your analysis of the data.	
Step 5	What planning and changes will or have occurred, as a result of assessment and analysis of data, to improve student learning?	

Program-Level Student Learning Outcomes (pSLOs) Assessed During 2010-12

Complete a separate page for each major and/or certificate you assessed.

Program Name: _____

Semester Fall Spring

Year: _____

Program Type: Transfer Major
 Certificate of Achievement
 Basic Skills Sequence
 Area of Emphasis
 Gen Ed Area

Assessed: Winter Summer

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	
Step 2	What method did you use to assess the SLO?	
Step 3	Describe the results of your assessment.	
Step 4	Describe your analysis of the data.	
Step 5	What planning and changes will or have occurred, as a result of assessment and analysis of data, to improve student learning?	

Program-Level Student Learning Outcomes for 2012-14

(List the 3-5 most important expected student learning outcomes to be assessed over the next two years.
Complete a separate page for each major and/or certificate you did not complete the assessment for the last 2 years.

Program Name: Biology **Year:**
2013-14
Program Type: Transfer Major **Semester to be Assessed:** Fall Spring
 Certificate of Achievement Winter Summer
 Basic Skills Sequence
 Area of Emphasis
 Gen Ed Area

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	#4: Confidently and accurately perform various experiments and activities in biology lab classes, including the correct use of different types of standard biology lab equipment.
Step 2	What method did you plan to use to assess the SLO?	We will evaluate and grade various skills using equipment such as pipettes, gels and electrophoresis equipment, the performance of streak plates, ability to safely and competently dissect specimens.
Step 3	When is the assessment going to be done and who is going to conduct it?	Fall 2013 and Spring 2014 by instructors in following courses: G100, G180, G182, G205, G210 and G220.

Program Name: Biology **Year:**
2013-14
Program Type: Transfer Major **Semester to be Assessed:** Fall Spring
 Certificate of Achievement Winter Summer
 Basic Skills Sequence
 Area of Emphasis
 Gen Ed Area

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	#5: Apply critical thinking and analytical skills to correctly interpret data they have produced in lab or data that is presented to them.
Step 2	What method did you plan to use to assess the SLO?	Multiple choice and short answer Q and evaluation of lab reports.
Step 3	When is the assessment going to be done and who is going to conduct it?	Fall 2013 and Spring 2014 by instructors in: G100, G104, G110, G180, G225

Program Name: Biology Semester to be Assessed: Fall Spring Year: 2013-14
 Program Type: Transfer Major Certificate of Achievement
 Basic Skills Sequence
 Area of Emphasis
 Gen Ed Area

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	#6: Explain biological concepts, theories, current research or other related topics clearly and concisely in the form of lab reports, essays, formal written papers or oral presentations.
Step 2	What method did you plan to use to assess the SLO?	Written essays or short answer exams.
Step 3	When is the assessment going to be done and who is going to conduct it?	Fall 2013 and Spring 2014 by instructors of following courses: G120, G160, G183, G200, G221

Program Name: _____ Semester to be Assessed: Fall Spring Year: _____
 Program Type: Transfer Major Certificate of Achievement
 Basic Skills Sequence
 Area of Emphasis
 Gen Ed Area

Step 1	Define the Expected Program Student Learning Outcome (pSLO).	
Step 2	What method did you plan to use to assess the SLO?	
Step 3	When is the assessment going to be done and who is going to conduct it?	

Resource Planning

Staffing What staff changes or additional employees does your program need to function adequately?

Faculty: 2 additional FT tenure-track positions

Management:

Classified: Replacement for one retired Instructional Associate (AI), long-term solution to extended medical leave of second IA.

Hourly: Part-time person to work evenings to support our ongoing night courses and labs.

Considering your current employees, what staff development/training does your program need?

In addition to a replacement for the retired IA and a long-term substitute for our IA on medical leave, we have a need for a part-time (4 hrs/night, Mon-Thurs.) evening assistant in biology. This is essential especially because many of our night instructors are part-time and they need more support since they are not on campus during the day when help is available.

Note: Complete all faculty request forms in separate files and submit with your program review report as an attachment.

Technology What improvements, changes or additions in equipment dedicated to your program are needed to function adequately?

Equipment or Software (e.g., computers, AV, lab equipment):

1. Physiology lab – all new (or a significant upgrade) in the computer-driven lab data generating equipment. The BioPac is well over 10 years and not user-friendly by today's standards. A minimum of 8 stations is needed, 12 preferably. An estimate is \$6000/unit for hardware and software.
2. MS 124a: New projector screen, 36 lab seats need replaced (backs broken, no longer move up and down)
3. MS 118: Desks are too small, no left-handed desks
4. Dissecting microscopes for MS 113 (zoology lab) – current scopes are at least 20 years old.
5. New document cameras – Elmo projectors or AverVision 300 AF+ to help teach non-majors Biology
6. Smart Boards to replace whiteboards in MS and HS classrooms.
7. Updated equipment for seawater testing and geological aspects of the marine environment for Marine Life courses.
8. Majors Biology: 2 large shaking water baths (one of the current ones is over 30 years old!). Various enzymes and chemical reagents that have not been purchased recently due to cost, equipment available cannot be used to run experiments. These are exercises commonly performed by students at other colleges; we should budget for necessary reagents to be on par with other institutions.

Technical Infrastructure (e.g., AV or computer infrastructure, cabling):

1. There is a huge need for a computer-driven, all-campus testing center. Many rooms and some buildings are currently unused so space should not be a problem. This center could accommodate all manners of testing that require proper proctoring and computer stations. Students in disciplines all over campus would benefit from such a test center. Such a center will require the hiring of qualified classified staff and the commitment of the campus Administration to keep the test center open and funded.

Facilities What improvements or changes to the facilities would you need to function adequately?

Physical Concerns (e.g. electrical, gas, water, foundation, space, ventilation).

The age and size of the Math Science buildings continue to be a growing problem. Regarding course seat counts, most biology course lectures fall into the large class category often in classrooms barely large enough to seat our students. Seats are old, small and sometimes broken. The writing surfaces are very small and make it difficult for students to take notes. The cramped classrooms make it exceedingly difficult to maintain a secure testing environment. It often falls upon the instructor to find volunteer proctors (fellow instructors or G205 students) for exams. Although the department prioritizes maintaining academic integrity in our programs we do not have the resources (classroom support staff) to adequately monitor student testing. Perhaps a campus-wide Testing Center or the addition of more Student Instructional Associates would be ways to alleviate this problem

We are next in line for a new science building once the state passes a bond measure for matching funds. Unfortunately the next bond is not due to go on the California ballot until fall 2014, meaning 6-8 years *at best* before a new building will be completed. Our classrooms, labs and stockrooms are in dire need of repair and updating. We are happy that the Administration has stepped up and air quality testing has been done by Forensic Analytical in many of our lab rooms and prep areas. The Dept. is very glad that ventilation in the anatomy lab, MS 124a, has improved greatly with the additional vents put in place and that ongoing testing is scheduled to take place this semester. But we still have a ways to go. In that same anatomy lab there is only 1 working sink out of the four in the room. This is the only sink where students can wash their hands and tools after dissecting. This is not a sanitary or efficient environment and requests for repair have not been heeded as yet. In addition, all biology lab rooms are in need of a thorough cleaning from top to bottom. Another casualty of the budget crisis has been a decrease in housekeeping personnel and it is very evident when one views the condition of our labs and classrooms (actually somewhat embarrassing). We strive to model professional behavior and want our students to take their education seriously. It is difficult to maintain a level of high professionalism when the physical facilities are in such bad shape.

Health, Safety and Security

1. Mold testing and remediation in MS 111 and the prep areas is needed. This may include sealing off the doorway from the micro prep area into MS 113, zoology lab. It may involve repairs to the ceiling space, installation of HEPA filters, etc.
2. We request improved District support for continued testing all rooms used for dissections, with prompt

reporting of data to our Dean, Jeff Courchaine and the Dept. IUA. The time between testing and getting the results back takes too long and there is no expedient way that data is reported to the Dept. (For example, no action has been taken in regards to an above-acceptable formaldehyde exposure reading of 0.37 reported by Forensic Analytical in MS 113, Zoology lab.)

In MS and HS buildings there is ongoing mold contamination in lecture rooms and the microbiology prep areas. This is a huge issue for health and safety; many mold spores cause allergies and some may cause mold intoxication exposure. Many of our ceiling tiles display evidence of water leaks coming from the air space between the floors; the stains are unsightly and disgusting. Plumbing leaks are the norm in our labs, with limited M&O personnel left to scramble for parts because the fixtures are so old they are no longer carried by plumbing companies.

New chairs are needed in our rooms, backs are sometimes missing or they are old and unstable. Carpeting that is frayed (especially in the doorways) may cause a tripping hazard – faculty have observed this on a few occasions. While some of these issues may seem “just cosmetic,” teaching and learning in rooms in such poor condition does have a huge negative impact on concentration and morale for students and instructors alike. One of our students in Biology is a very involved person on campus: returning Student Senator, student representative for the Facility Safety and Land Development committee, Chair of the Sustainability Committee (to name just a few of his activities). He recently stated to one of our faculty that it is such a disappointment to walk from the extraordinarily beautiful campus grounds at GWC into classrooms that are “disgusting” and where “we are supposed to learn amid crowded seating, filth and broken furniture.” Students, faculty and staff alike want to be proud of their association with Golden West College but cannot due to substandard facilities. With no relief in sight, it is becoming increasingly difficult to maintain a high quality of biology instruction at GWC and we are all worried about the future of the Biology program in view of our outdated, unkempt and at times unsafe science buildings.

Other What changes or other additions need to be made to your program to function adequately?

IUA and Dean Review

Complete this section after reviewing all program review information provided. IUA and Dean are to separately indicate the level of concern for the program that exists regarding the following Program Vitality Review (PVR) criteria. Add comments for any item marked with a 1 or 2. Identify whether the comment is made by the IUA or the Dean.

(Scale: 0 – No concern at all, 1 – Some concern, 2 – Serious Concern)

IUA/Dean

(0) () a. Significant declines in enrollment and/or FTES over multiple years

(2) () b. Significant change in facility and/or availability and cost of required or necessary equipment

(2) () c. Scarcity of qualified faculty

(0) () d. Incongruence of program with college mission and goals, state mandates, etc

(0) () e. Significant decline in labor market

(0) () f. Continued inability to make load for full-time faculty in the program

(0) () g. An over-saturation of similar programs in the district and/or region

(2) () h. Other: Aging, outdated buildings leading to health/safety concerns and a lower quality of instruction and student learning.

Signatures, Individual Comments

Department Chair: Date:
Comments:

Division Dean: Date:
Comments:

() No further review necessary

() We recommend this program for Program Vitality Review

I have read the preceding report and accept the conclusions as an accurate portrayal of the current status of the program. Signatures are on file in the division office. Type the names of the faculty.

- (X) Annamaria Crescimanno
- (X) MaryLynne LaMantia
- (X) Travis Vail
- (X) Kate Egan
- (X) Stephen Miller
- (X) Nikki Plaster

I have read the preceding report and wish to add signed comments to the appendices.
Signatures are on file in the division office.

- ()
- ()
- ()
- ()
- ()

Appendices

- A. Data Sets
- B. Signed Comments
- C. Classified Position Requests
- D. Faculty Position Requests
- E. General Fund One-Time Funds Requests
- F. Curriculum Inventory
- G. SLO Inventory

