

**NORCO COLLEGE
COMPREHENSIVE INSTRUCTIONAL PROGRAM/UNIT REVIEW**

Discipline/Unit/Department: BIO/MIC/HES

Program(s) or Certificate(s) Associated: **Biology ADT**

Contact Person: Teresa Friedrich Finnern

Due: April 20, 2017

Please send an electronic copy as a Word document (avoid PDF)
programreview@norcollege.edu



Form Last Revised: November 2016

Norco College

Web Resources: <http://www.rccd.edu/administration/educationalservices/ieffectiveness/Pages/ProgramReview.aspx>

Comprehensive Instructional Program/Unit Review Update Instructions

***Please retain this information for your discipline's/department's use (or forward to your chair).**

The Comprehensive Program Review is conducted by each unit at Norco College and consists of an analysis of changes within the unit as well as significant new resource needs for staff, resources, facilities, and equipment for the next four years, while reflecting on the changes within the last four years. This document serves as a long-term strategic planning document. This planning document should reflect the period since the last Comprehensives submitted by your unit and should also cover the planning for the next four years. In the year submitted, an annual program review will not be submitted.

For Program Review data, please go to the following link:

<http://www.norcocollege.edu/about/president/strategic-planning/programreview/Pages/Comprehensive-Instructional-Program-Review.aspx>

The questions on the subsequent pages are intended to assist you in planning for your unit.

The forms that follow are separated into pages for ease of distribution to relevant subcommittees. **Please keep the pages separated** if possible (though part of the same electronic file), **with the headers as they appear**, and be sure to include your unit, contact person (this may change from topic to topic) and date on each page submitted. Don't let formatting concerns slow you down. If you have difficulty with formatting, Nicole C. Brown can adjust the document for you. Simply add responses to those questions that apply and forward the document to nicole.brown@norcocollege.edu with a request to format it appropriately.

If you cannot identify in which category your requests belong or if you have complex-funding requests please schedule an appointment with your college's Vice President for Business Services right away. They will assist you with estimating the cost of your requests. For simple requests such as the cost of a staff member, please e-mail your Vice President. It is vital to include cost estimates in your request forms. Each college uses its own prioritization system. Inquiries regarding that process should be directed to your Vice President.

Norco: VP Business Services 951-372-7157

Mission

Norco College serves our students, our community, and its workforce by providing educational opportunities, celebrating diversity, and promoting collaboration. We encourage an inclusive, innovative approach to learning and the creative application of emerging technologies. We provide foundational skills and pathways to transfer, career and technical education, certificates and degrees.

Vision

Norco – creating opportunities to transform our students and community for the dynamic challenges of tomorrow.

Educational Master Plan and Strategic Plan Goals and Objectives 2013-2018

Goal 1: Increase Student Achievement and Success

Objectives:

1. Improve transfer preparedness (completes 60 transferable units with a 2.0 GPA or higher).
2. Improve transfer rate by 10% over 5 years.
3. Increase the percentage of basic skills students who complete the basic skills pipeline by supporting the development of alternatives to traditional basic skills curriculum.
4. Improve persistence rates by 5% over 5 years (fall-spring; fall-fall).
5. Increase completion rate of degrees and certificates over 6 years.
6. Increase success and retention rates.
7. Increase percentage of students who complete 15 units, 30 units, 60 units.
8. Increase the percentage of students who begin addressing basic skills needs in their first year.
9. Decrease the success gap of students in online courses as compared to face-to-face instruction.
10. Increase course completion, certificate and degree completion, and transfer rates of underrepresented students.

Goal 2: Improve the Quality of Student Life

Objectives:

1. Increase student engagement (faculty and student interaction, active learning, student effort, support for learners).
2. Increase frequency of student participation in co-curricular activities.
3. Increase student satisfaction and importance ratings for student support services.
4. Increase the percentage of students who consider the college environment to be inclusive.
5. Decrease the percentage of students who experience unfair treatment based on diversity-related characteristics.
6. Increase current students' awareness about college resources dedicated to student success.

Goal 3: Increase Student Access

Objectives:

1. Increase percentage of students who declare an educational goal.
2. Increase percentage of new students who develop an educational plan.
3. Increase percentage of continuing students who develop an educational plan.
4. Ensure the distribution of our student population is reflective of the communities we serve.
5. Reduce scheduling conflicts that negatively impact student completion of degrees and programs.

Goal 4: Create Effective Community Partnerships

Objectives:

1. Increase the number of students who participate in summer bridge programs or boot camps.
2. Increase the number of industry partners who participate in industry advisory council activities.
3. Increase the number of dollars available through scholarships for Norco College students.
4. Increase institutional awareness of partnerships, internships, and job opportunities established with business and industry.
5. Continue the success of Kennedy Partnership (percent of students 2.5 GPA+, number of students in co-curricular activities, number of students who are able to access courses; number of college units taken).
6. Increase community partnerships.
7. Increase institutional awareness of community partnerships.
8. Increase external funding sources which support college programs and initiatives.

Goal 5: Strengthen Student Learning

Objectives:

1. 100% of units (disciplines, Student Support Service areas, administrative units) will conduct systematic program reviews.
2. Increase the percentage of student learning and service area outcomes assessments that utilize authentic methods.
3. Increase the percentage of programs that conduct program level outcomes assessment that closes the loop.
4. Increase assessment of student learning in online courses to ensure that it is consistent with student learning in face-to-face courses.
5. Increase the number of faculty development workshops focusing on pedagogy each academic year.

Goal 6: Demonstrate Effective Planning Processes

Objectives:

1. Increase the use of data to enhance effective enrollment management strategies.
2. Systematically assess the effectiveness of strategic planning committees and councils.
3. Ensure that resource allocation is tied to planning.
4. Institutionalize the current Technology Plan.
5. Revise the Facilities Master Plan.

Goal 7: Strengthen Our Commitment To Our Employees

Objectives:

1. Provide professional development activities for all employees.
2. Increase the percentage of employees who consider the college environment to be inclusive.
3. Decrease the percentage of employees who experience unfair treatment based on diversity-related characteristics.
4. Increase participation in events and celebrations related to inclusiveness.
5. Implement programs that support the safety, health, and wellness of our college community.

I. Norco College Comprehensive Instructional Program Review Update

Unit: __ BIO/MIC/HES __
 Contact Person: __ Teresa Friedrich Finnern __
 Date: __ 4/20/17 __

Trends and Relevant Data

1. Have there been any changes in the status of your unit in the last four years? What are the anticipated changes for the next four years?

Question:	Prior Four Years	Next Four Years
Has your unit shifted departments?	Math and Science	Science and Kinesiology
Have any new certificates programs been created by your unit? For example, did your unit develop an ADT ? If not, discuss if you are in process or have future plans to do so.	N/A	Biology ADT has been developed. Environmental Science ADT will be developed once the CCCCO template has been completed.
Have you made any substantial modifications to certificates/degrees (e.g. unit requirement changes, inclusion of an industry certificate, etc.). If not, discuss if you are in process or have future plans to do so.	N/A	No
Have activities in other units impacted your unit? For example, a new Multimedia grant could cause greater demand for Art courses or a new ADT may require resources such as supplemental courses for another unit's ADT .	STEM grant has provided SI assistance and equipment	The STEM grant has been renewed, which will provide a safety hood for the Bio prep area. ADT in Biology increases the need for Chemistry and Physics classes. Increases in lab courses require additional support from laboratory technicians, which require a new hire.

2. List your retention and success rates as well as your efficiency for the previous four years. Please include Distance Education, retention, success and efficiency separately. Discuss any changes or significant trends in the data.

Success for BIO:

2011-12	2012-13	2013-14	2014-15	2015-16
52.74%	51.92%	61.83%	56.82%	61.39%

Retention for BIO:

2011-12	2012-13	2013-14	2014-15	2015-16
68.22%	67.55%	77.70%	77.54%	81.64%

Efficiency for BIO:

Summer 2012	0.000
Fall 2012	615.689
Winter 2013	0.000
Spring 2013	775.200
Summer 2013	479.625
Fall 2013	766.271
Winter 2014	504.875
Spring 2014	791.752
Summer 2014	488.050
Fall 2014	670.154
Winter 2015	530.113
Spring 2015	664.578
Summer 2015	479.638
Fall 2015	671.404
Winter 2016	496.463
Spring 2016	589.229

Success for MIC:

2011-12	2012-13	2013-14	2014-15	2015-16
64.42%	55.32%	57.27%	82.71%	85.16%

Retention for MIC:

2011-12	2012-13	2013-14	2014-15	2015-16
71.78%	62.41%	69.09%	90.23%	90.63%

Efficiency for MIC:

Summer 2012	0.000
Fall 2012	570.560
Winter 2013	0.000
Spring 2013	483.700
Summer 2013	0.000
Fall 2013	398.800
Winter 2014	0.000
Spring 2014	534.750
Summer 2014	0.000
Fall 2014	730.750
Winter 2015	0.000
Spring 2015	428.400
Summer 2015	0.000
Fall 2015	458.375
Winter 2016	0.000
Spring 2016	503.200

Success for HES:

2011-12	2012-13	2013-14	2014-15	2015-16
69.35%	73.28%	76.71%	75.45%	79.38%

Retention for HES:

2011-12	2012-13	2013-14	2014-15	2015-16
88.24%	90.73%	92.24%	92.34%	90.08%

Efficiency for HES:

Summer 2012	1002.400
Fall 2012	1198.071
Winter 2013	0.000
Spring 2013	1141.217
Summer 2013	1013.511
Fall 2013	1173.350
Winter 2014	867.644
Spring 2014	1111.352
Summer 2014	831.035
Fall 2014	810.740
Winter 2015	958.282
Spring 2015	912.800
Summer 2015	817.500
Fall 2015	1013.818
Winter 2016	917.200
Spring 2016	903.267

BIO rates have remained relatively flat for the last 4 years despite our unit's efforts to increase success and retention rates through supplemental instruction, course revamping, adding online comprehensive homework assignments, and "How to Succeed" workshops. The MIC rates appear to have improved based on the data above, but the source data may need to be reviewed as they are inconsistent with the experience of the instructors. HES consistently has high success and retention.

3. Include program-specific data and discuss any changes or significant trends in the data. Include the number of

graduates in the discipline/program/certificate, as well as the number of students who have declared the program(s) of study, that your unit supports. Discuss any changes or significant trends in the data.

The Biology ADT is new, and we have not had any graduates from the program.

The AOE in Math and Science is as follows:

Annual 2013-2014	Annual 2014-2015	Annual 2015-2016
145	139	138

There is an apparent decrease in number of A.S. degrees in the Math and Science AOE. The data provided indicate that the frequency that the Math and Science AOE is selected is 2111, which is 17.8%.

4. In the table below, state your goals from your previous comprehensive unit reviews. List the most important first.

There is no previous comprehensive review for this unit. From previous annual reviews, an important goal was to increase course offerings, which we have been able to do. Our unit has developed the following courses to offer at Norco College: Bio-1H (Honor’s General Biology), Bio-3 (Field Botany), Bio-5 (General Botany), Bio-7 (Marine Biology), Bio-8 (Ecology), Bio-17 (Human Biology), and Bio-36 (Environmental Science), in addition to continuing to develop and improve Bio-1 (General Biology), Bio-11 (Introduction to Cell and Molecular Biology), Bio-12 (Introduction to Organismal and Population Biology), Mic-1 (Microbiology), and HES-1 (Health Science). Tailored local lab manuals have been developed by our faculty to specifically augment some of these courses.

State your goals from your previous comprehensive unit reviews	List activity(s) linked to the goal	Indicate progress made towards the goal	Discuss relationship of goal to College mission and Strategic Planning Goals/Ed Master Plan
Please see paragraph above.			

5. Please list the resources that you have received in the last four academic years as a result of program review. How did the resources impact student learning? If you requested resources but did not receive them, how did that impact student learning? If no resource requests were made, please indicate by typing N/A

Resources impact student learning by providing more relevant biotechnology for improved laboratory experiences. Our unit has been able to purchase the following vital equipment to enhance student learning: shades, new tables and a watering system for the greenhouse, plant presses and storage cases, a cell counter, and mammalian tissue culture supplies and equipment.

6. In the table below, please list your long term goals for your unit. How do your goals support the College mission and

the goals of the Educational Master Plan/Strategic Plan? **Your unit may need assistance to reach its goals. Financial resources should be listed on the subsequent forms. In addition, you may need help from other units or Administrators. Please list that on the appropriate form below, or on the form for “other needs.”*

List the long term goals of your unit for the next four years.	List activity(s) linked to the goal	Anticipated timeline for completion	Discuss relationship of goal to College mission and Strategic Planning Goals/ Ed Master Plan
Double number of major’s level course offerings.	Offer all BIO majors courses each semester	Anticipated completion by Spring 2020	Provide educational opportunities by increasing transfer preparedness
Develop a tailored local lab manual for Microbiology	Develop labs and write an appropriately leveled lab manual	Anticipated completion by Spring 2020	Provide an innovative approach to learning

Course Outlines of Record (COR)

An important part of comprehensive program review is a review of the course outlines of record that are associated with a unit. Please list all of the courses in your unit as listed in the [Norco College Catalog](#) and the date that they were last updated. If they have not been updated in the last four years, you must update them before submitting your program review, e.g., making sure the edition of the textbook is current. Please do not submit the actual COR. Add to the table as needed

Course Number	Date Last Updated	Last Editor (name)	If not current, where is the COR in the review process	Was the last update a major or minor modification?
Biology 1	4/9/16 In Review	Greg Burchett	Has passed all three college curriculum committees, waiting on board approval	Major
Biology 1H	4/10/16	Greg Burchett	Same as above	Major
Biology 3	4/10/16	Greg Burchett	Same as above	Major
Biology 5	4/10/16	Greg Burchett	Same as above	Major
Biology 7	4/10/16	Greg Burchett	Same as above	Major
Biology 8	4/10/16	Greg Burchett	Same as above	Major
Biology 10	5/9/16	Greg Burchett	Same as above	Major
Biology 11	4/10/16	Greg Burchett	Same as above	Major – New course number will be Biology 60
Biology 12	4/10/16	Greg Burchett	Same as above	Major – New course number will be 61
Biology 34	10/27/16	Greg Burchett	Same as above	Major – New course number will be 18

Biology 36	10/27/16	Greg Burchett	Same as above	Major – New course number will be 19
Biology 17	10/27/16	Greg Burchett	Same as above	Major – New course number will be 4
Biology 30	10/27/16	Greg Burchett	Same as above	Major – New course number will be 16
Microbiology 1	4/11/16	Greg Burchett	Same as above	Major – New course number will be Biology 55
AMY 2A	4/11/16	Greg Burchett	Same as above	Major – New course number will be Biology 50A
AMY 2B	4/11/16	Greg Burchett	Same as above	Major – New course number will be Biology 50B
AMY 10	4/11/16	Greg Burchett	Same as above	Major – New course number will be Biology 45
HES 1	10/27/16	Greg Burchett	Same as above	Major – New course number will be Biology 35, crossed listed with Health Science

Norco College Comprehensive Instructional Program Review Update

Unit: __ BIO/MIC/HES __
 Contact Person: __ Teresa Friedrich Finnern __
 Date: __ 4/20/17 __

Current Human Resource Status

7. Complete the Faculty and Staff Employment Grid below. Please list full and part time faculty numbers in separate columns. Please list classified staff who are full and part time separately:

Faculty Employed in the Unit		
Teaching Assignment (e.g. Math, English)	Full-time faculty (give number)	Part-time faculty (give number)
Biology	3	6
Microbiology	2	1
Health	1 (KIN, not our unit)	6

Classified Staff Employed in the Unit		
Staff Title	Full-time staff (give number)	Part-time staff (give number)
Laboratory Technician	4 total in all sciences, 2 regularly work with this unit	

Long Term Resource Planning

This section should be completed with your long term goals in mind. However, as you will not be filing an annual program review this academic year, you may need to include some of your short-term resource requests as well.

8. Staff Needs

NEW OR REPLACEMENT STAFF (Administrator, Faculty or Classified)¹

List Staff Positions Needed Please justify and explain each faculty request as they pertain to the goals listed in item #6. Place titles on list in order (rank) or importance. Please state if the request impacts Distance Education.	Indicate (N) = New or (R) = Replacement	Number of years request has been made	Annual TCP*	EMP Goals	Short Term Goal (S) Long Term Goal (L)
<p>1. Full-time Laboratory Technician <u>Justification</u> As the college continues to increase the number of FTES, the science department has increased the number of lab courses offered since 2013, without the equivalent increase in lab technician support staff. The science department has been in growth mode since the 2013 academic year. Every science discipline has seen an increase in the number of sections offered. In Fall 2013-Spring 2014 academic year, our department offered 54 sections in all disciplines that were supported by 4 lab techs. This is about 13.5 sections prepped per lab tech. In Fall 2016 to Spring 2017 academic year, our department offered 82 sections in all disciplines, that were supported by 4 lab techs. This is an increase per lab tech of 20.5 lab sections prepped per lab tech, an increase of 65.8%.</p>	N		\$60,000 – \$75,000		L
<p>2. Part-time Laboratory Technician <u>Justification</u> See above.</p>	N		Under \$60,000		S
<p>3. Full-time Biology Instructor <u>Justification</u> Bio-1 is almost entirely taught by part-time instructors. It is the</p>	N	5+ years	\$60,000 - \$80,000		L

¹ If your SLO assessment results make clear that particular resources are needed to more effectively serve students, please be sure to note that in the “reason” section of this form.

highest demand course in Biology, and having a full-time instructor would improve the student experience.					
4. <u>Justification</u>					
5. <u>Justification</u>					

* TCP = "[Total Cost of Position](#)" for one year is the cost of an average salary plus benefits for an individual. New positions (not replacement positions) also require space and equipment. Please speak with your college Business Officer to obtain accurate cost estimates. Please be sure to add related office space, equipment and other needs for new positions to the appropriate form and mention the link to the position. Please complete this form for "New" Classified Staff only. All replacement staff must be filled per Article I, Section C of the California School Employees Association (CSEA) contract. Requests for staff and administrators will be sent to the [Business and Facilities Planning Council](#). Requests for faculty will be sent to the [Academic Planning Council](#).

Unit Name: BIO/MIC/HES

9. Equipment & Technology Not Covered by Current Budget₂

<p>List Equipment, Technology, Software or Equipment Repair Needed for Academic Year _____</p> <p>Please list/summarize the needs of your unit on your college below.</p> <p>Please be as specific and as brief as possible.</p> <p>Place items on list in order (rank) or importance. Provide the Asset Tag Number(s) for replacement requests. In the Justification, include how the item addresses the department's goals, and if it assists in remaining competitive with comparable institutions (if applicable).</p> <p>Please state if the request impacts Distance Education.</p>	<p>*Indicate whether Equipment is for (I) = Instructional or (N) = Non-Instructional purposes</p>	<p>How many students/Staff/ departments will directly benefit from this equipment/ technology?</p>	<p>Number of years requested</p>	<p>Use this link for Annual TCO*</p>			<p>EMP GOALS</p>
				<p>Cost per item</p>	<p>Number Requested</p>	<p>Total Cost of Request</p>	
<p>1. Autoclave service contract</p> <p><u>Justification:</u> Norco college has only one working autoclave for 4 sections of microbiology. This autoclave is 10 years old. The average life of an autoclave is 25 years to 30 years. When this autoclave fails to function, which occurred spring of 2017, this has a detrimental effects on our microbiology labs. The cost of repairs was \$5000.00, which if this autoclave could be serviced regularly our college would overall save money. Currently each time this autoclave goes down our college spends between \$3000 and \$5000 dollars. A yearly service contact would overall cost less and would have the additional value of less disruption to our lab courses</p>	I	750 students per year, mostly for Mic-1. Bio-1 students & Bio-11 students need this equipment occasionally.	0	\$6000 per year annual contract	1	\$6000 per year	Goal 1, Obj 1 and Goal 2, Obj 1
<p>2. Storage shed for plant press cases</p> <p><u>Justification:</u> These are necessary for field botany classes and this equipment has no permanent storage facility. These plant presses are about 7 feet tall and approximately 4 feet wide. There are two of these units</p>	I	32	0	\$15000	1	\$15000 one time cost	Goal 1, Obj 1 and Goal 2, Obj 1

² If your SLO assessment results make clear that particular resources are needed to more effectively serve students, please be sure to note that in the "reason" section of this form.

3. New laptop computers (replacements) for IT128 <u>Justification:</u> Current computers are failing.	I	40	0	\$1500 per computer	40		Goal 1, Obj 1 and Goal 2, Obj 1
4. Replacement oxygen meters <u>Justification:</u> Current oxygen meters are failing.	I	60	0	\$300 each	8	\$2400	Goal 1, Obj 1 and Goal 2, Obj 1
5. Biology replacement slides 100 total <u>Justification:</u> Slides are occasionally broken by students and replacements are necessary	I	500	0	\$7.00 per slide	100	\$700.00	Goal 1, Obj 1 and Goal 2, Obj 1
6. Microbiology replacement slides 100 total <u>Justification:</u> Slides are occasionally broken by students and replacements are necessary	I	200	0	\$7.00 per slide	100	\$700.00	Goal 1, Obj 1 and Goal 2, Obj 1
7. New computer and software update for ELISA plate reader <u>Justification:</u> This equipment is 10 years old. The software needs a current computer system to run properly.	I	60	0	\$800	1	\$800	Goal 1, Obj 1 and Goal 2, Obj 1
8. ELISA plate servicing <u>Justification:</u> ELISA is an essential component of microbiology and major's level biology. Norco college has a plate reader which is 10 years old and needs to be serviced. Currently the plate reader is not working properly due to an out of date computer system and lack of service to the unit	I	500	0	\$2000	1	\$2000	Goal 1, Obj 1 and Goal 2, Obj 1
9. 3-tired seed sprouter <u>Justification:</u> Necessary for experiments in Bio-12, General Botany (Bio-5), and Ecology (Bio-8)	I	100	0	\$40 each	16	\$640	Goal 1, Obj 1 and Goal 2, Obj 2
10. Large corkboard display case in ST 201 suite wall <u>Justification:</u> Provide valuable information for students	N	100	2	\$500	1	\$500	Goal 1, Obj 1 and Goal 2, Obj 1
11. Bio-12 Anatomy models <u>Justification:</u> Helpful for students as they study anatomy.	I	60	0	\$300 - \$1000	6	\$3600	Goal 1, Obj 1 and Goal 2, Obj 1

12. Supplies for Bio-17 <u>Justification:</u> Specimens and models for teaching Human Biology	I	32	1	\$2000	1 section's worth	\$2000	Goal 1, Obj 1 and Goal 2, Obj 1
13. Supplies to increase Microbiology sections <u>Justification:</u> Necessary to increase course offerings, one additional section per semester	I	48	1	\$10,000	1	\$10,000	Goal 1, Obj 1 and Goal 2, Obj 1
14. Autoclave <u>Justification:</u> Increase capability for sterilization and removal of hazardous materials	N	750	0	\$80,000	1	\$80,000	Goal 1, Obj 1 and Goal 2, Obj 1

* Instructional Equipment is defined as equipment purchased for instructional activities involving presentation and/or hands-on experience to enhance student learning and skills development (i.e. desk for student or faculty use). Non-Instructional Equipment is defined as tangible district property of a more or less permanent nature that cannot be easily lost, stolen or destroyed; but which replaces, modernizes, or expands an existing instructional program. Furniture and computer software, which is an integral and necessary component for the use of other specific instructional equipment, may be included (i.e. desk for office staff).

** These requests are sent to the [Business and Facilities Planning Council](#).

Unit Name: BIO/MIC/HES

10. Professional or Organizational Development Needs Not Covered by Current Budget*₃

<p style="text-align: center;">List Professional Development Needs.</p> <p>Reasons might include in response to assessment findings or the need to update skills to comply with state, federal, professional organization requirements or the need to update skills/competencies. Please be as specific and as brief as possible. Some items may not have a cost per se, but reflect the need to spend current staff time differently. Place items on list in order (rank) or importance. Examples include local college workshops, state/national conferences. Please state if the request impacts Distance Education.</p>	Annual TCO*			
	Cost per item	Number Requested	Total Cost of Request	EMP Goals
<p>1. Environmental Mutagens and Genomics Society <u>Justification:</u> In order to keep current in our field of study scientific conferences are an important resource. The theme of the EMGS 46th Annual Meeting is “Research, Education, and Policy in Concert,” emphasizing the synergistic relationships enabled through EMGS. Sep 26-30th.</p>	\$2000.	2	\$4000.	1
<p>2. Ecological Society of America <u>Justification:</u> Keep current on the most exciting ecological issues and discoveries. The need for sound ecological science is critical and this conference is Aug 9-14th.</p>	\$2000.	2	\$4000.	1
<p>3. American Association of Immunologists <u>Justification:</u> See above. There are many specific conferences that would be of value to our unit and the students it serves.</p>	\$2000.	2	\$4000.	1
<p>4. OTHER SCIENTIFIC CONFERENCES <u>Justification:</u> See above. There are many specific conferences that would be of value to our unit and the students it serves.</p>	\$2000.	2	\$4000.	1

*It is recommended that you speak with the Faculty Development Coordinator to see if your request can be met with current budget.

** These requests are sent to the [Professional Development Committee](#) for review.

³ If your SLO assessment results make clear that particular resources are needed to more effectively serve students, please be sure to note that in the “reason” section of this form.

Unit Name: BIO/MIC/HES

11. Student Support Services, Library, and Learning Resource Center (see definition below*) Services needed by your unit over and above what is currently provided by student services at your college. Requests for Books, Periodicals, DVDs, and Databases must include specific titles/authors/ISBNs when applicable. Do not include textbook requests. These needs will be communicated to Student Services at your college⁴

<p align="center">List Student Support Services Needs</p> <p>Please list/summarize the needs of your unit on your college below. Please be as specific and as brief as possible. Not all needs will have a cost, but may require a reallocation of current staff time.</p>	<p align="center">EMP GOALS</p>	<p align="center">Distance Education</p>
<p>1. Supplemental instruction for microbiology, and biology 1. <u>Justification:</u> Our unit serves approximately 600 students in biology 1. Our unit needs instructional support and much better tutoring services for these courses. Our unit also completely lacks tutoring or any kind of instructional support for microbiology. If we are committed to student success then tutoring services is required. However, often our instructors do not know the tutors or in the case that we do know the SI instructors they change from one semester to the next. This rotation does not allow for a fully developed supplemental instruction program. To solve this problem our unit may require additional funds for tutors.</p>	<p align="center">Goal 1</p>	
<p>2. <u>Justification</u></p>		
<p>3. <u>Justification</u></p>		
<p>4. <u>Justification</u></p>		
<p>5. <u>Justification</u></p>		
<p>6. <u>Justification</u></p>		

⁴ If your SLO assessment results make clear that particular resources are needed to more effectively serve students, please be sure to note that in the “reason” section of this form.

*Student Support Services include for example: tutoring, counseling, international students, EOPS, job placement, admissions and records, student assessment (placement), health services, student activities, college safety and police, food services, student financial aid, and matriculation.

** These requests are sent to the [Student Services Planning Council](#) and the [Library Advisory Committee](#).

Unit Name: BIO/MIC/HES

12. OTHER NEEDS AND LONG TERM SAFETY CONCERNS not covered by current budgets

**** For immediate hazards, contact your supervisor ****

<p style="text-align: center;">List Other Needs that do not fit elsewhere.</p> <p>Please be as specific and as brief as possible. Not all needs will have a cost, but may require a reallocation of current staff time. Place items on list in order (rank) or importance. Please state if the request impacts Distance Education.</p>	Annual TCO*			
	Cost per item	Number Requested	Total Cost of Request	EMP Goals
<p>1. Color copier in Norco College Copy Center <u>Justification:</u> Necessary for small color copy jobs for rapid turn around</p>	Ask Eloy Bueno	1	Ask Eloy Bueno	Goal 2, Obj 1
<p>2. Repairs to Microbiology Lab <u>Justification:</u> This lab is not holding up well through student use continues. Students sometimes spill stains onto the new tiles and when this occurs (usually one a year) the tiles are permanently stained. The counter tops in this room face similar wear and tear issues.</p>	Ask Gary Tsubota	1 lab room	Ask Gary Tsubota	Goal 1
<p>3. NEW PRINTER AND STAND-ALONE SCANNER FOR 1 FACULTY IN ST 201B <u>Justification:</u> printer is at least 10 years old and scanners are necessary for our web enhanced courses</p>	\$1000	1	\$1000	N/A
<p>4. New hardbound photographic biology atlas for Bio courses <u>Justification:</u> current atlases provided through STEM grant are soft/spiral bound and are falling apart due to student use.</p>	75.00	40	\$3000	Goal 1

5 If your SLO assessment results make clear that particular resources are needed to more effectively serve students, please be sure to note that in the “reason” section of this form.

5. <u>Justification</u>				
6. <u>Justification</u>				

These requests are sent to the [Business and Facilities Planning Council](#), but are not ranked. They are further reviewed as funding becomes available.

Norco College – Program Review Committee

Spring 2015

Rubric for Comprehensive Instructional Program Review - Part I only

Discipline:

Contact Person:

Reviewer:

Average Score:

Area of Assessment	0 No attempt	1 some attempt	2 good attempt	3 outstanding attempt
1. Trends and status change, prior and next four years identified	Trends and status change section is blank	Only prior or next four years completed, not both	/	Prior and next four years section completed with clear information in both, or identified as N/A
2. Retention, success, and efficiency rates have been identified and reflected upon	No identification or discussion of retention, success, or efficiency data	Limited identification or discussion of retention, success, and efficiency data	Clear identification and discussion of retention, success, and efficiency data	Substantial identification and discussion/interpretation of success, retention and efficiency data
3. (If Applicable) Specific program/certificate data are included and discussed	Not addressed	Missing data but attempt was made	Data were present but not discussed	Data were present and commented upon OR No program or certificate
4. Goals from prior comprehensive identified, activities linked to the goal, progress stated	No goals from prior comprehensive identified	Limited/generic statement made regarding goal(s), lacks clarity or details and/or activities, and/or progress stated	Clear statement made regarding goal(s), activities, and progress	Well-defined statement made regarding goal(s), and activities, includes details & reasoning, progress stated in depth

5. Long term goals identified, activities and timeline stated	No attempt made to identify long term goals, activities, and timeline	Limited/generic statement made regarding goal(s), lacks clarity or details and/or activities, and/or timeline	Clear statement made regarding goal(s), activities, and timeline	Well-defined statement and justification made regarding goal(s), and activities, includes details & reasoning, suggested timeline
6. Long term goals aligned to mission and EMP	No link between the long term goals and the Mission or EMP	Limited attempt to link goals to Mission and EMP	Clear attempt to link goals to Mission and EMP	Well defined connection made between goals and Mission and EMP
7. Course Outline of Record section is completed	COR section is blank	COR section is partially completed, missing some courses from catalog	/	COR section is completed in its entirety – all courses in catalog identified
8. Linkages made between reasons for resource request and EMP/Strategic Plan Goals (SPG)	No linkage made between resource requests and EMP/SPG	Limited/generic/basic connection made between resource requests and EMP/SPG	Clear connection made between resource requests and EMP/SPG	Substantial connection made between resource requests and EMP/SPG
Column scores				
(If no programs of study are applicable, do not average in points from item #3)				

Additional comments:

II. Comprehensive Program Review Assessment Update

Purpose –This comprehensive review should provide your unit with an opportunity to reflect and analyze any trends from the assessments you conducted **over the past four years**. Consider it a meta-analysis of your own work. This update is intended to facilitate discussion within your discipline regarding the types of assessments, the range of outcomes you have experienced with regard to increasing student success, and any changes, modifications, or improvements you have made to courses that seem to have supported student learning. It should also provide you with an opportunity to determine a plan of action for assessment for the next four years. Use data stored in TracDat, your Annual Program Reviews, and the Norco Assessment Rotation Plan to help you to complete this review. If you have any questions, please contact either Sarah Burnett at sarah.burnett@norcocollege.edu, or Greg Aycock at greg.aycock@norcocollege.edu or talk to your NAC representative.

Please take some time to review assessment from the past four years and answer the following questions.

Section 1: Discipline Evaluation of Assessment Process

- a. In the first column please identify each of the courses you assessed **in the past four years**. Then state if the assessments were implemented by an individual faculty (I), or as collaborative group (C). Identify the primary **modes of assessment** (embedded tests, assignments with rubrics, class projects etc.). In the final column, please explain why your discipline uses the modes identified (pedagogical reasoning). Add rows as needed.

Course	Individual (I) Collaborative (C)	Primary Modes of Assessment (Embedded tests, rubrics, projects, etc.)	Pedagogical Reasoning – why does your discipline use these methods for assessment
Bio-1	I	Embedded questions, mixed methods (success seminar)	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-10	I	Written assignment and embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-12	I	Written assignment and embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-17	I	Embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-1H	I	Written assignment	This method allows instructors to use relevant material to

			test students in an appropriate manner.
Bio-3	I	Written assignment (case study) and embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-34	I	Embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-36	I	Embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-5	I	Embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-7	I	Embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.
Bio-8	I	Embedded questions	This method allows instructors to use relevant material to test students in an appropriate manner.

- b. Please provide an overview of the types of **changes made** (updated test questions, revised PowerPoints, redesigned assignments, new assignments) in a course or a program in response to your assessments. Explain which changes led to either greater student success, or didn't make any impact on student learning (provide reasoned argument as to why you think this occurred). In the final column identify which assessments led to permanent modifications.

Program and/or Course Name	Changes made (Updated test questions, new rubrics, revised assignments, etc.)	Identify if any changes had an impact (positive, negative, or neutral) on student success (provide reasoning)	Permanent modifications made to course in response to assessment Yes or No
Bio-1	Revise and create new assignments, updated test questions	Neutral – student success is stable in this course. Some positive for the Student Success Seminars.	No

Bio-10	Revise and create new assignments, updated test questions	Neutral – student success is stable in this course.	No
Bio-12	Revise and create new assignments, add 2 nd draft prior to final draft	Neutral – student success is stable in this course. Assessment of changes pending.	No
Bio-17	Revise and create new assignments, updated test questions	Neutral – student success is stable in this course.	No
Bio-1H	Revise and create new assignments, new textbook with online homework, updated test questions	Neutral – student success is stable in this course.	No
Bio-3	Revise and create new assignments	Neutral – student success is stable in this course.	No
Bio-34	Revise and create new assignments, updated test questions	Neutral – student success is stable in this course.	No
Bio-36	Revise and create new assignments, new textbook, updated test questions	Neutral – student success is stable in this course.	No
Bio-5	Revise and create new assignments, new textbook , updated test questions	Neutral – student success is stable in this course.	No
Bio-8	Revise and create new assignments, new textbook, updated test questions	Neutral – student success is stable in this course.	No
Bio-7	Revise and create new assignments, updated test questions	Neutral – student success is stable in this course.	No

- c. Please discuss any external variables that you think might have provided support or deterred from your ability to increase student success in your discipline. Indicate N/A if you determine that no external variables impacted student success. (add rows as needed)

External Variables

Course/Program	External Variables that supported or deterred from increasing student success
All courses in our unit	Students have lives outside of the course that impact their incentive and ability to succeed in

	these courses. Personal and financial hardships can severely impede their progress in college.

- d. Please identify any **teaching approaches** (pedagogy) that you perceive to have had a positive impact on your student’s ability to engage in the learning process. This might not specifically include elements that have been formally assessed, but rather may reflect on good teaching practices that you deem effective. It might relate to elements such as the way you might have restructured the class (e.g., small group vs. direct lecture), the way in which you disseminate information (e.g., lecture vs. flipped classroom or action based learning). It might include the manner in which you gain feedback from students (journals, or clickers).

The student success seminar, which provided students with additional instructor time and study tools, seems to have a positive impact on student success.

- e. On reflection, can you identify any specific **resources**, support, or training that your discipline, department, or the institution might need to provide on-going support for student learning? If so, please explain. Please also identify any trainings or support from NAC that has been helpful or useful in planning or conducting assessment in your unit.

If instructors are compensated for time provided to students outside of class and office hours, additional seminars throughout the college may be more feasible. Another possibility would be setting up a biology/science study lab, similar to math lab, with faculty compensation for instructional time. Students need more contact time with instructors and with the material to improve student success.

Section 2: Overview of Completed Assessment from the past four years

Using TracDat, or your Annual Program Reviews from the past four years please fill in the following data **for each courses and program your discipline lists in the Norco College catalog**. Please identify any courses that are in the process of being removed from the catalog. Please list programs first then courses.

Program Name/ Course Number	Total number of initial assessments conducted	Total Number of changes made to courses as a result of assessment	Total number of loop- closing assessments conducted	Total of all assessment activity for each course/program (all columns combined)
Bio-1	10	10	5 changes made, but not yet assessed	25
Bio-10	5	6	0	11

Bio-12	5	5	5 changes, 1 follow-up	16
Bio-17	2	2	0	4
Bio-1H	1	1	1 change, not yet assessed	3
Bio-3	6	6	6 changes, not yet assessed	18
Bio-34	3	3	3 changes, not yet assessed	9
Bio-36	4	4	4 changes, not yet assessed	12
Bio-5	4	4	4 changes, not yet assessed	12
Bio-7	3	3	3 changes, not yet assessed	9
Bio-8	4	0	0	4

Section 3: Plan for Assessment

Please provide a comprehensive plan for assessment in your unit for the upcoming four years. Please identify any loop closing assessments that are carrying over from the prior four years of assessment (e.g., type *loop-closing* after them) – you should not plan to include a loop closing before you conduct an initial assessment.

Include plans for:

- **all programs** in your sole control (certificates or ADTs)
- **all courses** in your discipline
- **all SLOs** in each course

Suggestions for possible formats:

- If you have an existing rotation plan for course offerings it might be simple to identify which SLOs and PLOs will be assessed in each of the semesters on the rotation plan. Please imbed that plan directly into this document below.
- You could use a curriculum mapping tool to track completed SLO assessment, and subsequently evidence for completed PLO assessment.

In either cases, it is critical to know when each program assessment is due so that you can plan when to do the SLO assessment. It might be helpful to create separate plans for each Program, especially in CTE. The Norco Assessment Rotation Schedule is posted on the Assessment website for you to use in planning for Program Level assessment.

Please see TracDat for this information. Assessment in our unit is done individually, and each instructor develops his or her own plan for assessment of course SLOs.

Scoring Rubric for Comprehensive Program Review of Assessment – Part II only

Assessment Unit Name: _____

Average score _____

	0	1	2	3	Comments
Section 1 <ul style="list-style-type: none"> • Modes of assessment & reasoning _____ • Changes Made to courses _____ • Success indicators _____ • Teaching approaches _____ • Resources _____ 	No attempt made to provide responses to any of the questions (1-4)	Answers are extremely limited, e.g., yes, no, none; inconsistent depth in some responses; barely any reflection or insight provided, limited attempt to use assessment to increase <i>understanding</i> of student success and learning in the classroom	Clear and consistent responses to each question, some indication the discipline has attempted to use discipline based assessment results to increase <i>understanding</i> of student success and learning in the classroom	Clear and in depth responses to each question, strong indication the discipline has utilized assessment as a tool to increase <i>understanding</i> of student success and learning in the classroom, and teacher development	
	0	1	2	3	
Section 2 <ul style="list-style-type: none"> • # of initial, changes made, loop-closing activities for course and program 	Chart is blank	Does not include all courses or programs	/	All courses and programs in the discipline are listed on the chart, each box has a number (or a zero to indicate “nothing” or no assessment conducted)	
	0	1		3	
Section 3 Plan for assessment in the coming 4 years <ul style="list-style-type: none"> • Programs • Courses • SLOs 	No Plan provided	Does not include all Programs _____ Courses _____ SLOs _____	/	All programs, courses and SLOs are included in assessment plan for the next four years – rotation cycle considered in plan	
	0	1		3	
Column Totals					