NORCO COLLEGE
COMPREHENSIVE INSTRUCTIONAL PROGRAM/UNIT REVIEW

Discipline/Unit/Department: ___Anatomy_and Physiology_____

Program(s) or Certificate(s) Associated: _____

Contact Person: _ Charles Sternburg_____
Due: April 20, 2017

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

Form Last Revised: November 2016

Norco College

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

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?	Yes. Prior to 2017 AMY was part of the Department of Math, Science and Kinesiology	As of 20117, math and science have split into two departments and AMY is now part of the department of 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.	No	No
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.	We have made no substantial modifications except the addition of Bio 1 as a prerequisite for AMY 2A	We have, as yet, not significant modification plans of this type.
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.	No	ADT in Kin would increase demand for A&P classes.

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.

For AMY, there are no distance education classes and all labs are face-to-face 1:1 time equivalent with lectures. 2016 was the first year that we had separate data for the three Anatomy/Physiology courses; AMY 10, AMY 2A and AMY 2B. Previous years combined data for all AMY course even though AMY 10 is a non-laboratory survey course targeted for students wishing to enter the LVN (Licensed Vocational Nurse) program and AMY 2A and AMY 2B are intensive laboratory oriented courses targeting a different set of students who are working toward entry into RN (Registered Nurse) programs. Previous to 2016 separate data for these three courses in two separate categories was unavailable. Starting in 2016, we have a somewhat better picture by which we can assess success rates and retention rates for Anatomy. So we do not have four years of relevant data to review.

Another piece of useful data that is still lacking, and one that would help us make better interpretations from the data, is the number of individuals that constitute each group in the breakdowns. For an extreme example: In 2011, for American Indian or Alaskan Natives Success rate was 39% and retention rate was 65%. For 2012, the data was roughly the same, 36% and 62% respectively. In 2013, for this ethnic group, success and retention rates reached 100% then fell to 0% in 2014 and 2015. So how do we interpret this? There are two possibilities:
1.   In 2014, all American Indian and Alaskan Natives failed to complete AMY 10.
2.   In 2014, no American Indian or Alaskan Natives took the course.
As one can see, without data for the number of individuals in each group, erroneous interpretations are not only possible, but they are inevitable.

In the past, I tried to eliminate some of the obvious inefficiencies in the data and focused where perhaps some more meaningful interpretations could be made. The data reproduced below is still vague <u>in a scientific sense</u> and care must be made in the interpretations.

There is no compilation of data for *all groups* combined from which we can view the average success and retention rates as a whole to see how much each group either deviates from or converges with the average.
For example, if we take the average success rate for all ethnicities combined for AMY 10, average success rate for **2015** is 68%. We could interpret this as meaning
- success rates for white students are 9% higher than average
- success rates for Hispanics are statistically average
- success rates for Asian students are 4% higher than the average
- success rates for African American students are 12% lower than average

But if we compare the same data from 2011, average success rate for **2011** is only 39%. 2011 data shows
- success rates for white students were 15% higher than average at 54%,
- success rates for Hispanics were 10% below average,
- success rates for Asian students were 9% higher than the average and
- success rates for African American students are 13% lower than average.

Examining the bullet points above, a general trend appears in which white and Asian students have success rates above average and Hispanic and African American students in these courses perform below average. At least, this is what this data suggests. Two interpretations that can be made here; each can give us

contradictory workable results.

The data shows that in 2011 African American students taking AMY 10 had a success rate 13% below average at 26% and in 2015 their success rate in AMY 10 **doubled** to 56% and yet, their success rate is still 12% below average. How do African American students double their success rate in AMY 10 and still stay the same percentage below average?

The problem in the data is illustrated by my first example concerning American Indian and Alaskan Natives (Native American?). Without data concerning the actual **number** of individuals in these groups, whether it be ethnicity, age, or gender, no meaningful interpretations can be made. If they were all large groups, statistical data would be more meaningful but if the group is significantly small compared to the larger groups of Hispanic and white students; as it is with black, Asian and Native American students we can't use this data to make any meaningful interpretation. It is definitely NOT my experience (in teaching all three of these courses; AMY 10, 2A and 2B on a regular basis) that there is such a significant difference in success rates among ethnicities or age groups.
- If you have 30 students of the same ethnicity in a class and one of them fails to succeed, then that ethnicity shows a **96.6% success rate**.
- But, if you have only two students of the same ethnicity in a class and one of them fails to succeed in the course, then that is a **50% success rate**.
- If you have only one student of a particular ethnicity in a class and that student fails to succeed in the course, then that is recorded as a 0% success rate.
- And, if you have only one student of a particular ethnicity in a class and that student succeed in the course, then that is recorded as a 100% success rate.

The point is that we need the actual number of students of each ethnicity to make a meaningful analysis. That said, this is what I **can** see from this data for all three courses; AMY 10, 2A and 2B. The data shows an upward trend in success and retention for all ethnicities except for Native Americans and Pacific Islanders and for all age groups except for the 35-39 age group and the 50+ age group. This upward trend reaches the highest numbers in 2014 and 2015 as can be seen by the graphs supplied by the college for this purpose. The increase in success and retention rates is dramatic over the last two years. There is, however, nothing in the numbers supplied that would give us a clue as to why this upward trend is visible. We have increased our offerings for all three of the Anatomy courses in the last few years and we now have two full time instructors and three very competent part time instructors teaching these sections. Anatomy and Physiology, here at Norco College, does **not** represent a coordinated effort among the faculty who teach the course. All instructors rigorously follow the course outline of record, but beyond that, they all have enough expertise in the subject that they are free to run their classes as individuals. If they weren't they would not have been hired in the first place. Our quality part time instructors are rewarded in that they continue teaching assignments from semester to semester. Many of them in the past have been lost to us by full time appointments at other institutions. In science, we are meticulous about our hiring policies for part time instructors and we only have very competent qualified instructors teaching these courses. Success and retention rates in these courses are significantly higher than the success rates for the entire college; which are also not included in the data but as I recall from the faculty meetings, was less than 10% overall.   So, we submit this data with a sense of pride of accomplishment for our AMY faculty.

New Success and Retention Data for 2015

1. AMY 10

By Ethnicity, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
White	77%	88%
Hispanic	68%	89%

Asian	72%	80%
Black or African American	56%	62%

By Age, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
20-24	64%	81%
25-29	70%	80%
30-34	73%	85%
35-39	0%	0%
40-49	85%	85%
50+	80%	80%

By Gender, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
Female	64%	79%
Male	79%	95%

Note, as one compares AMY 10 success and retention rates with AMY 2A and 2B which are the two most rigorous courses and therefore the most demanding for the students who participate in them, success and retention rates are higher for the more rigorous courses.

2. AMY 2A

By Ethnicity, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
White	78%	84%
Hispanic	74%	85%
Asian	78%	91%
Black or African American	60%	73%

By Age, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
20-24	73%	84%
25-29	69%	79%
30-34	81%	95%
35-39	83%	100%
40-49	83%	100%
50+	100%	100%

By Gender, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
Female	71%	91%
Male	85%	94%

3. AMY 2B

By Ethnicity, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
White	83%	89%
Hispanic	88%	90%
Asian	71%	71%
Black or African American	88%	88%

By Age, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
20-24	83%	86%
25-29	78%	81%
30-34	88%	94%
35-39	89%	89%
40-49	100%	100%
50+	100%	100%

10

By Gender, we see the following Success and retention rates for AM 10, 2015

	Success	Retention
Female	84%	86%
Male	84%	86%

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.**

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

List the goals of your unit for 2016-2017	Define activity(s) linked to the goal	Briefly explain the relationship of goal to mission and Strategic Plan/Educational Master Plan (see above)	Indicate if goal is limited to Distance Education
ST207 Goal is to purchase 32 upgraded laptops with functional batteries to replace current laptops. Current ST 207 laptops have reached the end of their service life but can be transferred to ST 211 and repurposed.	These laptop computers are used in virtual physiology experimental labs in physiology.	Improvement of instruction. These laptop computers are used in virtual physiology experimental labs in physiology.	

ST 211 & ST 207 Goal to purchase a college license for the Visible Body software. This would allow students to visualize the human body in 3-D images that can be manipulated.	For a course sequence like AMY 2A and 2B it is impossible to use human cadavers unless they have been dissected in a Gross Anatomy class; which we don't offer in our district. Otherwise, the human specimen is too time consuming for a class that combines anatomy and physiology.	Currently, there is a severe shortage of cats that have been used until now as dissection specimens for labs. In the near future virtual human dissections will become the preferred method for lecture laboratory analysis of the human body.	
ST211 The goal is to upgrade to new Olympus CX43 microscopes for ST211	Microscopes are integral to study for over 30% of the lab work done in AMY 2A and AMY 2B. Current microscopes in ST211 are at least 25 years old and have reached the end of their service life	Improvement of instruction.	

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

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

Upgrade of ST 211 lab: Removal of non-functional fume hood and replace with a table-high storage/display cabinet.	This project was finally begun in May, 2016. Work has just begun and the final outcome is pending.	The goal is to improve the space in ST211 by removing a significant visual obstacle to the whiteboard and projection screen and replacing it with a specimen display case. (in progress)	
Upgrade of ST 211 lab: Addition of two additional in-ceiling light fixtures over two lab tables closest to the doors.	This project will begin in late May, 2016. Work has not yet begun and the final outcome is pending.	Done as of May16, 2016	
Upgrade of ST 211 lab: Replacement of the 24 desks on the floor with a more stationary and wheel-less variety.	This project was not accomplished. We were given the go-ahead for the purchase, but we were not able to get a P.O. from	Existing desks appeared as an unsolicited "upgrade" during the secondary effects rebuild of the biology labs. They are on	

	the requisition before the final fiscal deadline.	wheels, which is not at all necessary, and they are a safety hazard.	
Safety issue concerning autoclave in ST 202 Prep Storage room	First measurements for this project were not taken until last week, May 4th, 2016. The final outcome is pending.	As of this date, measurements have been taken for the blast wall, but action is pending.	
ST207 Addition of wireless printer for Campo lab	This item was requested for ST 207 last year in program review and was recently received.	Improvement of instruction. We have a computer and internet access in the lab and needed printing capabilities.	
ST 207 Six additional laptop computers to replace missing laptops.	These items were requested for ST 207 last year in program review and were recently received.	Improvement of instruction for virtual labs and exercises.	
ST 207 addition of display model of intestinal villi for instructional purposes			

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 <u>Educational Master Plan/Strategic Plan</u>?** *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

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?
AMY 10	Current	Loomis/Rosario	current	minor
AMY 2A	Current	Loomis/Rosario	current	minor
AMY 2B	Current	Loomis/Rosario	current	minor

Norco College Comprehensive Instructional Program Review Update

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)
AMY 2A	2	3
AMY 2B	2	3
AMY 10	?	1

Classified Staff Employed in the Unit		
Staff Title	Full-time staff (give number)	Part-time staff (give number)
AMY 2A	3	
AMY 2B	Same 3	

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)
1.1 full time tenure track faculty position. Justification Replacement of full time professor retiring in the next 2-3 years.	R	First year			
3. 1. full time science service technician Justification: Required to facilitate increased workload by current science service staff.	N	First year			
3. Justification					
4. Justification					
5. Justification					

* 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 <u>must</u> 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.

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[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.

9. Equipment & Technology <u>Not</u> Covered by Current Budget[2]

List Equipment, Technology, Software or Equipment Repair Needed for Academic Year_____ **Please list/summarize the needs of your unit on your college below. Please be as specific and as brief as possible.** 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). Please state if the request impacts Distance Education.	*Indicate whether Equipment is for (I) = Instructional or (N) = Non-Instructional purposes	How many students/Staff/ departments will directly benefit from this equipment/ technology?	Number of years requested	Cost per item	Number Requested	Total Cost of Request	EMP GOALS
				Use this link for Annual TCO*			
1. ST211 Upgrade to new Olympus CX43 microscopes for ST211 Justification: <u>Improvement of instruction:</u> Microscopes are integral to study for over 30% of the lab work done in AMY 2A and AMY 2B. Current microscopes in ST211 are at least 25 years old and have reached the end of their service life	I		1				
2. ST 211 & ST 207 Goal to purchase a college license for the Visible Body software. This would allow students to visualize the human body in 3-D images that can be manipulated. <u>Justification:</u> Improvement of instruction: For a course sequence like AMY 2A and 2B it is impossible to use human cadavers unless they have been dissected in a Gross Anatomy class; which we don't offer in our district. Otherwise, the human specimen is too time consuming for a class that combines anatomy and physiology. In the near future virtual dissections will become the preferred method for lecture laboratory analysis of the human body.	I	All students/sta ff/faculty	2	$5,000			

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[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.

4. ST207 Goal is to purchase 32 upgraded laptops with functional batteries to replace current laptops. Current ST 207 laptops have reached the end of their service life but can be transferred to ST 211 and repurposed. Improvement of instruction. These laptop computers are used in virtual physiology experimental labs in physiology. <u>Justification:</u>	**I**		**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: _____

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

List Professional Development Needs. 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.	**Annual TCO***			
	Cost per item	**Number Requested**	**Total Cost of Request**	**EMP Goals**

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[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.

1. For 2017, for the AMY group as well as the science group as a whole we would **request funding to attend some of the conferences** and symposia that come up each year. And compensation for substitute instructors if we happen to be away during scheduled class times. Justification : For the five faculty at Norco College that teach Anatomy and Physiology either AMY 10 or the AMY 2A-2B sequence (two are full time and three are part time), ongoing professional development is part of our professional nature. Professor Standen is active in the American Association of Physical Anthropologists, which is a subject that has profound and interesting relevance to human anatomy. I personally (Prof. Sternburg) am associated with the Society of Integrative and Comparative Biologists and I am a lifetime member of the Sigma XI Society for Distinguished Research. We all support the American Association for the Advancement of Science through our journal subscriptions. I have been a reviewer of Human Anatomy and Physiology Textbooks published by McGraw Hill Co. I am also the author of most of the books used in my AMY 2A, 2B, and 10 classes. We engage in ongoing dialogue concerning the subjects we teach and constantly inform each other of new developments in the field, relevant books and publications and new ideas that put an interesting spin on old concepts. Access to current topics and literature is key. We associate with the other faculty in the science department as well and there is an ongoing collegiate dialogue that benefits us all and the students are rewarded by this. Physiology is a dynamic field and it is currently in a period of important development new insights abound in the field and, for the most part, have not made their way into the textbooks. Keeping up with the field and bringing new information to the group is in our nature as scientists and reflective of the interest and dedication that all of us bring to this small group in our biology department (this goes beyond just AMY into Microbiology, Genetics, Bio 11 and 12, Ecology and Botany as well).				
2. ONLINE ACCESS TO SCIENTIFIC LITERATURE. Justification : As faculty in a science department of a major California College institution we would all benefit if Norco College could arrange for the science faculty to				

have unrestricted online access through a UC or a Cal State to current scientific literature.				
3. Justification				
4. Justification				
5. Justification				
6. Justification				

*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.

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 college[4]

List Student Support Services Needs 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.	**EMP GOALS**	**Distance Education**
1. ONLINE ACCESS TO SCIENTIFIC LITERATURE. Justification : As faculty in a science department of a major California College institution we would all benefit if Norco College could arrange for the science faculty to have unrestricted online access through a UC or a Cal State to current scientific literature.		
2. 1. Support from tutorial services has improved over the last year. In 2013 we were blessed with a group of very competent and very valuable tutors that worked through tutorial services. Students were able to take full advantage of tutorial services for the whole year. Currently we have a shortage of tutors. Currently we have two tutors for AMY 2A but only one of those individuals tutors for AMY 2B. The students could use more. The DEMAND for tutorial help seems to far outstrip the limited resources of Tutorial Services.		
3. Justification		
4. Justification		
5. Justification		

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[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.

6. Justification		

*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: _____

12. OTHER NEEDS AND LONG TERM SAFETY CONCERNS not covered by current budget[5]
** For immediate hazards, contact your supervisor **

List Other Needs that do not fit elsewhere. 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.	Annual TCO*			
	Cost per item	Number Requested	Total Cost of Request	EMP Goals
1. Justification				
2. Justification				
3. Justification				
4. Justification				
5. Justification				

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[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.

6. Justification				

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

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

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

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).

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.

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)

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.

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

Assessment Unit Name: _____   **Average score** _____

	0	1	2	3	Comments
Section 1 • **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) 0	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 *understanding* of student success and learning in the classroom 1	Clear and consistent responses to each question, some indication the discipline has attempted to use discipline based assessment results to increase *understanding* of student success and learning in the classroom 2	Clear and in depth responses to each question, strong indication the discipline has utilized assessment as a tool to increase *understanding* of student success and learning in the classroom, and teacher development 3	
Section 2 • **# of initial, changes made, loop-closing activities for course and program**	Chart is blank 0	Does not include all courses or programs 1		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) 3	
Section 3 **Plan for assessment in the coming 4 years** • **Programs** • **Courses** • **SLOs**	No Plan provided 0	Does not include all Programs ____ Courses ____ SLOs ____ 1		All programs, courses and SLOs are included in assessment plan for the next four years – rotation cycle considered in plan 3	
Column Totals					