Curriculum Committee Meeting Agenda

Voting Committee Members

Pam Morse (Chair)	Linnea Jaeger	John Schoppert
Kristen Booth	Doris Jepson (Vice Chair)	Stephen Shwiff
P.K. Hoffman	Zip Krummel	
Katy Jablonski	Emilie Miller	

Non-Voting Committee Members

Susan Lewis (Curriculum) Dawn Sallee-Justesen (Student Services)

Support Staff

Gail Gilliland (Curriculum)

Guests

Dan Ropek

February 15, 2018 3:30 am – 5:00 pm
The Dalles Campus, room 3.218 (student services conference room)
Hood River Campus, room 1.209 (conference room)

Information items (no voting required):

1. none

Business:

1. Approval of February 1, 2018 minutes [1]

Submissions [2] (times are estimates):

1. Dan Ropek (3:35 – 4:00 pm)
    - BI 101 Biology (Gen Ed CLO update)
    - BI 121 Introduction to Human Anatomy and Physiology I (Gen Ed CLO update)
    - BI 122 Introduction to Human Anatomy and Physiology II (Gen Ed CLO update)
    - BI 141 Habitats: Life of the Forest (Gen Ed CLO update)
    - BI 142 Habitats: Marine Biology (Gen Ed CLO update)
    - BI 143 Habitats: Fresh Water Biology (Gen Ed CLO update)
    - BI 231 Human Anatomy and Physiology I (Gen Ed CLO update)
    - BI 232 Human Anatomy and Physiology II (Gen Ed CLO update)
    - BI 233 Human Anatomy and Physiology III (Gen Ed CLO update)
    - BI 234 Microbiology (Gen Ed CLO update)

Discussion Items:

1. Definitions of "In-Depth" and "Minimally" (Kristen & P.K.: 4:00 – 4:55 pm)

Next Meeting: March 8, 2018

Attachments: [1]February 1, 2018 minutes; [2]Submissions: 10 Gen Ed CLO updates; [3]Draft Definitions.

Curriculum Committee Minutes
February 1, 2018
3:30pm – 5:00pm
Location: TDC Room 3.218 (SS Conference Room) and Hood River Room 1.209 (conference room)

PRESENT

Voting Committee Members

Pam Morse (Chair)
P.K. Hoffman (phone)
Katy Jablonski (phone)
Linnea Jaeger
Doris Jepson (Vice Chair)
Emilie Miller
Stephen Shwiff

Non-Voting Committee Members

Susan Lewis (Curriculum)

Support Staff

Gail Gilliland (Curriculum)

Guests

ABSENT

Voting Committee Members

Kristen Booth
Zip Krummel
John Schoppert

Non-Voting Committee Members

Dawn Sallee-Justesen (Student Services)

Item	Discussion	Action
Call to Order	Meeting called to order by Pam at 3:35pm	
Informational item: none		
Business	**Motion: approve January 18, 2018 minutes as written**	Motion: Emilie 2nd: Linnea Action: 6 in favor – 0 opposed – 0 abstentions
Submissions		
MTH 105 Math in Society (Gen Ed CLO update)	Pam answered question on behalf of the Math department. There are no changes to the Math	Motion: Doris 2nd: Linnea

	submissions. They are being brought through the Curriculum Committee for the Gen Ed CLO update. **Motion: approve as written**	Action: 6 in favor – 0 opposed – 0 abstentions
MTH 111 College Algebra (Gen Ed CLO update)	**Motion: approve as written**	Motion: Linnea 2nd: Emilie Action: 6 in favor – 0 opposed – 0 abstentions
MTH 112 Elementary Functions (Gen Ed CLO update)	**Motion: approve as written**	Motion: Doris 2nd: Linnea Action: 6 in favor – 0 opposed – 0 abstentions
MTH 243 Statistics I (Gen Ed CLO update)	**Motion: approve as written**	Motion: Linnea 2nd: Doris Action: 6 in favor – 0 opposed – 0 abstentions
MTH 244 Statistics II (Gen Ed CLO update)	**Motion: approve as written**	Motion: Katy 2nd: PK Action: 6 in favor – 0 opposed – 0 abstentions
MTH 251 Calculus I (Gen Ed CLO update)	**Motion: approve as written**	Motion: Doris 2nd: Linnea Action: 6 in favor – 0 opposed – 0 abstentions
MTH 252 Calculus II (Gen Ed CLO update)	3:45pm Stephen arrives. **Motion: approve as written**	Motion: Linnea 2nd: Stephen

		Action: 6 in favor – 0 opposed – 0 abstentions
MTH 253 Calculus III (Gen Ed CLO update)	Mark box #4 not addressed **Motion: approve as amended to mark CLO #4 as "not addressed"**	Motion: Linnea 2nd: Emilie Action: 6 in favor – 0 opposed – 0 abstentions
Discussion Items:		
	(P.K.: 4:00 – 4:55 pm)	
Definitions of "In-Depth" and "Minimally"	E-mail comments from Kristen, Katy, Zip and PK were read to the Curriculum Committee. Strong concerns about using the word "Minimally" were expressed. "Minimally" does not represent what is needed. Committee debated the use of the following words to replace "in-depth" and "minimally": • "Level 1" and "Level 2" removing the use of any weighted words and replacing with numbers • "Primary", "Secondary" and "Not Addressed" (concerns about this sounding like primary and secondary school) • "Major designation" and "Minor designation" (liked that it was terminology used and recognized in academia, liked that it implied that effort was still required for the minor designation) Agreed upon using "major/minor" terminology. Changing the title of the formerly "in-depth" designation does not require any change to the previously agreed upon definition.	Motion: 2nd Action: in favor – 0 opposed – 0 abstentions

	Discussion on the definition of "minor" ensued. Effort was made to mirror language used in the definition of "major". Concern was expressed about including language that implied time limitations on how long a student would retain what was learned; rather the difference between "major" and "minor" was based on how much exposure the student would have to the CLO. Working off of suggested definitions provided in email, the committee crafted the following definition for a "minor" designation: 1. The outcome is addressed adequately in the curriculum, establishing fundamental understanding 2. Students can demonstrate and are assessed on a fundamental understanding of the outcome It was decided to table the discussion until the next meeting to allow some time to think about the proposed definition and make further suggestions if needed. ACTION ITEM: Susan will write up the definition and e-mail it to the committee for responses and potential discussion prior to the meeting.	
Adjourn: 5:00pm	PK moves to adjourn, Linnea 2nds	
Next Meeting: February 15, 2018 3:30pm – 5:00pm Location: TDC Room 3.218 (SS Conference Room) and HRC Room 1.209 (Conference Room)		

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 101	Course Title:	Biology
Course Credits:	4	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Introduces the properties of life, morphology and physiology of cells, cell chemistry, energy transformation, and the basic principles of ecology. A laboratory science course designed for non-biology majors. Prerequisites: WR 115, RD 115 and MTH 20 or equivalent placement test scores. Audit available.		
Course Outcomes:	1. Differentiate between and appropriately use inductive and deductive reasoning in decision making. 2. Gather information, assess its validity, and differentiate factual information from opinion and pseudo-science by learning and practicing methods used by biological scientists. 3. Apply biological principles and generalizations to novel problems. 4. Practice the application of biological information in life (personal and professional). 5. Develop informed positions or opinions on contemporary issues and communicate effectively using appropriate biological vocabulary.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Core Learning Outcomes (CLO):**
   Through their respective disciplines, CGCC students who earn a degree can:
   1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
   2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)

3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised 1) Outcomes 1. Differentiate between and appropriately use inductive and deductive reasoning in decision making. 2. Gather information, assess its validity, and differentiate factual information from opinion and pseudo-science by learning and practicing methods used by biological scientists. 2) Course Content: This CLO is addressed in depth because this course utilizes many modes of student communication of the various aspects of the material, in both lecture and laboratory. This content may be assessed utilizing one or more of the following activities: 1. Weekly homework assignments 2. Regular quizzes after each chapter 3. Weekly applications of laboratory experiences
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised 1) Outcomes 1. Differentiate between and appropriately use inductive and deductive reasoning in decision making. 2. Gather information, assess its validity, and differentiate factual information from opinion and pseudo-science by learning and practicing methods used by biological scientists. 3. Apply biological principles and generalizations to novel problems. 4. Practice the application of biological information in life (personal and professional). 5. Develop informed positions or opinions on contemporary issues and communicate effectively using appropriate biological vocabulary.

	2) Course Content This CLO is addressed in depth in this course as it is an innate aspect of science courses and this field of inquiry, Biology, in particular, to utilize critical thinking and problem solving approaches to the material in lecture and laboratory activities. This includes critical thinking, research methods, history of research in the field, etc. being taught as part of the course content and is conveyed by the very nature of the laboratory activities, as well as through many of the assessment activities, including essay questions and self-assessment. This content may be assessed utilizing one or more of the following activities: • Essay and multiple choice exams • Weekly homework assignments • Weekly applications of laboratory experiences
Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☒ in-depth ☐ minimally ☐ not addressed significantly	1) Outcomes 1. Differentiate between and appropriately use inductive and deductive reasoning in decision making. 2. Gather information, assess its validity, and differentiate factual information from opinion and pseudo-science by learning and practicing methods used by biological scientists. 2) Course Content: This CLO is addressed in depth because both lecture and laboratory utilize data to discuss and process the course content. This content may be assessed utilizing one or more of the following activities: 1. Homework assignments 2. Applications of laboratory experiences 3. Quizzes 4. Examinations
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☐ in-depth ☐ minimally ☒ not addressed significantly	☒ no changes ☐ revised 1) Outcomes 1. Differentiate between and appropriately use inductive and deductive reasoning in decision making. 2. Gather information, assess its validity, and differentiate factual information from opinion and pseudo-science by learning and practicing methods used by biological scientists. 4. Practice the application of biological information in life (personal and professional). 5. Develop informed positions or opinions on contemporary issues and communicate effectively using appropriate biological vocabulary. 2) Course Content This CLO is addressed minimally as human impacts on environment are impacted by cultural differences, and many cultural differences can be traced to human interactions with the environment. Content may be assessed utilizing one or more of the following activities: • Essay and multiple choice exams • Weekly applications of laboratory and field experiences

5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☒ in-depth ☐ minimally ☐ not addressed significantly	☒ no changes ☐ revised 1) Outcomes 2. Gather information, assess its validity, and differentiate factual information from opinion and pseudo-science by learning and practicing methods used by biological scientists. 3. Apply biological principles and generalizations to novel problems. 4. Practice the application of biological information in life (personal and professional). 5. Develop informed positions or opinions on contemporary issues and communicate effectively using appropriate biological vocabulary. 2) Course Content This CLO is addressed in depth because a primary focus of this course is the consequences of human activity upon the natural world. Aspects of human activity on the social world are also covered in content such as the effects of social values on or relationships with the natural world. For example, the importance of endangered species and how society has responded to this challenge throughout history. This content may be assessed utilizing one or more of the following activities: • Essay and multiple choice exams • Weekly homework assignments • Regular quizzes after each chapter • Weekly applications of laboratory experiences

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/24/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/24/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Submission will be placed on the next agenda with available time slots. You will be notified of your submission's time for review. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 121	Course Title:	Introduction to Human Anatomy and Physiology I
Course Credits:	5	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Surveys anatomical terminology, basic chemistry, cell structure and function, tissues, and the following systems: integumentary, skeletal, muscular, and nervous. Involves lecture discussions complemented by physiological laboratory exercises, dissections, microscopy, and multimedia. Prerequisite: MTH 60 or equivalent placement test scores. Prerequisite/concurrent: WR 121. Audit available.		
Course Outcomes:	1. Apply concepts and knowledge of the general terminology, cell structure and function, histology, gross anatomy, and physiology related to the integumentary, skeletal, muscular and nervous systems to novel technical and/or clinical scenarios. 2. Research and critically evaluate various sources of information related to these systems in order to discern reliable scientific information from unsourced information and "pseudo science". 3. Communicate information related to these systems through written, verbal, or multimedia formats in order to assess current knowledge, answer investigative questions, and explore new questions for additional research. 4. Evaluate information on human health and medical research as to its social, environmental, and ethical implications as part of responsible citizenship. 5. Use scientific laboratory equipment in order to gather and analyze data on human anatomy and physiology. 6. Use an understanding of how these human organ systems are interrelated to apply a holistic approach to human health.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Core Learning Outcomes (CLO):**

   Through their respective disciplines, CGCC students who earn a degree can:

   1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
   2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
   3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
   4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
   5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcome 3. Communicate information related to these systems through written, verbal, or multimedia formats in order to assess current knowledge, answer investigative questions, and explore new questions for additional research. 2. Course Content: This CLO is addressed in depth because this course utilizes many modes of student communication of the various aspects of the material, in both lecture and laboratory. This course introduces understanding through study modes and expression and the ability to effectively communicate about human systems. This content may be assessed utilizing one or more of the following activities: • Multiple choice exams • Chapter review homework assignments • Essay type quizzes at reasonable intervals • Weekly applications of laboratory experiences
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 1. Apply concepts and knowledge of the general terminology, cell structure and function, histology, gross anatomy, and physiology related to the integumentary, skeletal, muscular and nervous systems to novel technical and/or clinical scenarios. 2. Research and critically evaluate various sources of information related to

	these systems in order to discern reliable scientific information from unsourced information and "pseudo science". 4. Evaluate information on human health and medical research as to its social, environmental, and ethical implications as part of responsible citizenship. 5. Use scientific laboratory equipment in order to gather and analyze data on human anatomy and physiology. 6. Use an understanding of how these human organ systems are interrelated to apply a holistic approach to human health. 2. Course Content: This CLO is addressed in depth here because science courses and Biology in particular rely on critical thinking and creative problem-solving using both text-based and online research both in lab and in lecture. Molecular modeling provides evidence of how chemistry forms a basis for living things and how individuals differ and how that can lead to disease. Challenging student views by evaluating a variety of sources of information leads to better problem-solving abilities.
Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☒ in-depth ☐ minimally ☐ not addressed significantly	Outcomes: 2. Research and critically evaluate various sources of information related to these systems in order to discern reliable scientific information from unsourced information and "pseudo science". 4. Evaluate information on human health and medical research as to its social, environmental, and ethical implications as part of responsible citizenship. 5. Use scientific laboratory equipment in order to gather and analyze data on human anatomy and physiology. Course Content: This CLO is addressed in depth because both lecture and laboratory utilize data to discuss and process the course content. This content may be assessed utilizing one or more of the following activities: 1. Homework assignments 2. Applications of laboratory experiences 3. Quizzes 4. Examinations
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☐ in-depth ☒ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes: 1. Apply concepts and knowledge of the general terminology, cell structure and function, histology, gross anatomy, and physiology related to the integumentary, skeletal, muscular and nervous systems to novel technical and/or clinical scenarios. 6. Use an understanding of how these human organ systems are interrelated to apply a holistic approach to human health. 2. Course Content: This CLO is addressed minimally because this course like other science courses

	encourages appreciation of unique genetic diversity of many cultures and subsequent links to biological connections. Meiosis and its role in the reproductive cycle increases genetic diversity, an ecological strength that impact human cultures. Understanding a genetic level of organization can allow for constructive outcomes with cultural differences. This content may be assessed utilizing one or more of the following activities: • Essay type quizzes at reasonable intervals • Periodic individual presentations that address diversity
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☐ in-depth ☒ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes: 4. Evaluate information on human health and medical research as to its social, environmental, and ethical implications as part of responsible citizenship. 2. Course Content: This CLO is addressed minimally because although this course emphasizes human responsibility toward others and towards Environment in the community and service towards the health of others, it does not focus on that. This content may be assessed utilizing one or more of the following activities: • Multiple choice exams • Chapter review homework assignments • Essay type quizzes at reasonable intervals • Weekly applications of laboratory experiences

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/24/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/24/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Submission will be placed on the next agenda with available time slots. You will be notified of your submission's time for review. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 122	Course Title:	Introduction to Human Anatomy and Physiology II
Course Credits:	5	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Surveys the endocrine, lymphatic, cardiovascular, digestive, respiratory, reproductive, urinary, and some coverage of human development, human genetics, and immunology. Lecture discussions are complemented by laboratories which include physiological exercises, dissections, microscopy, and multimedia. Prerequisites: BI 121. Audit available.		
Course Outcomes:	1. Apply concepts and knowledge of the general terminology, cell structure and function, histology, gross anatomy, and physiology related to the endocrine, cardiovascular, lymphatic, digestive, respiratory, urinary and reproductive systems to novel technical and/or clinical scenarios. 2. Research and critically evaluate various sources of information related to these systems in order to discern reliable scientific information from unsourced information and "pseudo science". 3. Communicate information related to these systems through written, verbal, or multimedia formats in order to assess current knowledge, answer investigative questions, and explore new questions for additional research. 4. Evaluate information on human health and medical research as to its social, environmental, and ethical implications as part of responsible citizenship. 5. Use scientific laboratory equipment in order to gather and analyze data on human anatomy and physiology.		

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2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*

2. CGCC Core Learning Outcomes (CLO):

Through their respective disciplines, CGCC students who earn a degree can:

1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcome 3. Communicate information related to these systems through written, verbal, or multimedia formats in order to assess current knowledge, answer investigative questions, and explore new questions for additional research. Course Content: This CLO is addressed in depth because this course utilizes many modes of student communication of the various aspects of the material, in both lecture and laboratory. Building on BI 121, this course completes understanding through study modes and expression and the ability to effectively communicate about the remainder of human systems introduced there. This content may be assessed utilizing one or more of the following activities: • Multiple choice exams • Chapter review homework assignments • Essay type quizzes at reasonable intervals • Weekly applications of laboratory experiences
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised 1. Apply concepts and knowledge of the general terminology, cell structure and function, histology, gross anatomy, and physiology related to the endocrine, cardiovascular, lymphatic, digestive, respiratory, urinary and reproductive systems to novel technical and/or clinical scenarios. 2. Research and critically evaluate various sources of information related to these systems in order to discern reliable scientific information from unsourced information and "pseudo science". 4. Evaluate information on human health and medical research as to its

	social, environmental, and ethical implications as part of responsible citizenship. 5. Use scientific laboratory equipment in order to gather and analyze data on human anatomy and physiology. Course Content: This CLO is addressed in depth here because science courses and Biology in particular rely on critical thinking and creative problem-solving using both text-based and online research. Reasoning that includes access to past history of treatment of various human diseases compared with present day treatment encourages reflection and evaluation. Continuing to evaluate and add to anatomy and physiology learned in both classes leads to better problem-solving abilities.
Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☒ in-depth ☐ minimally ☐ not addressed significantly	Outcomes: 4. Research and critically evaluate various sources of information related to these systems in order to discern reliable scientific information from unsourced information and "pseudo science". 5. Evaluate information on human health and medical research as to its social, environmental, and ethical implications as part of responsible citizenship. 6. Use scientific laboratory equipment in order to gather and analyze data on human anatomy and physiology. Course Content: This CLO is addressed in depth because both lecture and laboratory utilize data to discuss and process the course content. This content may be assessed utilizing one or more of the following activities: 1. Homework assignments 2. Applications of laboratory experiences 3. Quizzes 4. Examinations
7. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☐ in-depth ☒ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes: 1. Apply concepts and knowledge of the general terminology, cell structure and function, histology, gross anatomy, and physiology related to the endocrine, cardiovascular, lymphatic, digestive, respiratory, urinary and reproductive systems to novel technical and/or clinical scenarios. Course Content: This CLO is addressed minimally because this course like other science courses encourages appreciation of unique genetic diversity of many cultures and subsequent links to biological connections. Meiosis and its role in the reproductive cycle increases genetic diversity, an ecological strength. Understanding a genetic level of organization can allow for constructive outcomes with cultural differences. This content may be assessed utilizing one or more of the following activities: • Essay type quizzes at reasonable intervals • Periodic individual presentations that address diversity

8. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☐ in-depth ☒ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes: 4. Evaluate information on human health and medical research as to its social, environmental, and ethical implications as part of responsible citizenship. 2. Course Content: This CLO is addressed minimally because although this course emphasizes human responsibility toward others and towards Environment in the community and service towards the health of others, it does not focus on that. This content may be assessed utilizing one or more of the following activities: • Chapter review homework assignments • Weekly applications of laboratory experiences

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/25/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/25/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Submission will be placed on the next agenda with available time slots. You will be notified of your submission's time for review. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 141	Course Title:	Habitats: Life of the Forest
Course Credits:	4	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Examines structure and function of Eastside and Westside Oregon forest ecosystems. Covers distribution and interactions of plants, animals, microorganisms, climate and basic geology. Laboratory emphasizes identification and environmental testing. Prerequisites: MTH 20 or equivalent placement test scores. Prerequisite/concurrent: WR 121. Audit available.		
Course Outcomes:	1. Use basic principles of ecosystems structure and function to characterize a specific forest. 2. Identify and express how humans interact with the forest environment by applying basic principles of forest management. 3. Work with a team to initialize and complete a study of the biology, chemistry and physical characteristics of a forest.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Core Learning Outcomes (CLO):**
   Through their respective disciplines, CGCC students who earn a degree can:
   1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
   2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
   3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)

4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 1. Use basic principles of ecosystems structure and function to characterize a specific forest. 2. Identify and express how humans interact with the forest environment by applying basic principles of forest management. Course Content: This CLO is addressed in depth because this course utilizes many modes of student communication of the various aspects of the material, in both lecture and laboratory. This content may be assessed utilizing one or more of the following activities: a. Scientific paper critiques or written forestry issue analyses. b. Other oral presentations or special projects. c. One or two mid-terms and a final exam: may include essay questions.
3. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 1. Use basic principles of ecosystems structure and function to characterize a specific forest. 2. Identify and express how humans interact with the forest environment by applying basic principles of forest management. 3. Work with a team to initialize and complete a study of the biology, chemistry and physical characteristics of a forest. Course Content This CLO is addressed in depth in this course as it is an innate aspect of science courses and this field of inquiry, Forestry, in particular, to utilizes critical thinking and problem solving approaches to the material in lecture and laboratory activities. This includes critical thinking, research methods, history of research in the field, etc. being taught as part of the course content and is conveyed by the very nature of the laboratory activities, as well as through many of the assessment activities, including research papers. This content may be assessed utilizing one or more of the following activities:

	1. One or two mid-terms and a final exam: may include essay questions. 2. Student project (group or solo) involving design of an analytical exercise, collection of data, and write-up in laboratory notebook format. 3. Forestry scientific paper critiques or written forestry issue analyses. 4. Other oral presentations or special projects. 5. Forestry related laboratory and/or field experiences.
Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☐ in-depth ☒ minimally ☐ not addressed significantly	Outcomes: 2. Identify and express how humans interact with the forest environment by applying basic principles of forest management. 3. Work with a team to initialize and complete a study of the biology, chemistry and physical characteristics of a forest. Course Content: This CLO is addressed in depth because both lecture and laboratory utilize data to discuss and process the course content. This content may be assessed utilizing one or more of the following activities: • Homework assignments • Applications of laboratory experiences • Quizzes • Examinations
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☒ in-depth ☐ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes 1. Use basic principles of ecosystems structure and function to characterize a specific forest. 2. Identify and express how humans interact with the forest environment by applying basic principles of forest management. Course Content This CLO is addressed in depth as discussions around forestry in the Pacific Northwest center upon cultural differences between rural and urban, forester and environmentalist, and Native practices versus European settler practices. This content may be assessed utilizing one or more of the following activities: • Short quizzes: short answer, multiple choice, true/false, and matching. • One or two mid-terms and a final exam: may include essay questions. • Student project (group or solo) involving design of an analytical exercise, collection of data, and write-up in laboratory notebook format. • Forestry scientific paper critiques or written forestry issue analyses. • Other oral presentations or special projects.
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☒ in-depth ☐ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes 1. Use basic principles of ecosystems structure and function to characterize a specific forest. 2. Identify and express how humans interact with the forest environment by applying basic principles of forest management. 3. Work with a team to initialize and complete a study of the biology,

	chemistry and physical characteristics of a forest. Course Content This CLO is addressed in depth because the primary focus of this course is the consequences of human activity upon the natural world. Aspects of human activity on the social world are also covered in content such as the effects of social values on or relationships with the natural world. For example, the importance of endangered species and how society has responded to this challenge throughout history. This content may be assessed utilizing one or more of the following activities: • Short quizzes: short answer, multiple choice, true/false, and matching. • One or two mid-terms and a final exam: may include essay questions. • Student project (group or solo) involving design of an analytical exercise, collection of data, and write-up in laboratory notebook format. • Forestry scientific paper critiques or written forestry issue analyses. • Other oral presentations or special projects. • Forestry related laboratory and/or field experiences.

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/25/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/25/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Submission will be placed on the next agenda with available time slots. You will be notified of your submission's time for review. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 142	Course Title:	Habitats: Marine Biology
Course Credits:	4	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Examines marine environment and the ecology, physiology, and morphology of marine plants and animals, emphasizing Oregon habitats. Laboratory focuses on identification and environmental testing. Prerequisite: MTH 20 or equivalent placement test scores. Prerequisite/concurrent: WR 121. Audit available.		
Course Outcomes:	1. Use basic ecosystem principles to identify and understand the biology of various marine phyla and to characterize marine habitats. 2. Use scientific techniques to quantitatively describe parameters of marine habitats and understand the relationship of physical parameters to distribution of biota. 3. Use an understanding of research, laboratory and/or field experiences to organize data to illustrate and articulate basic ecological principles. 4. Use critical thinking to evaluate human impacts on marine ecosystems and to consider how local consumer and policy decisions can be informed by an understanding of the interconnectedness of marine habitats and the critical relationship of the sea to human cultures.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Core Learning Outcomes (CLO):**
   Through their respective disciplines, CGCC students who earn a degree can:
   1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)

2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 1. Use basic ecosystem principles to identify and understand the biology of various marine phyla and to characterize marine habitats. 2. Use scientific techniques to quantitatively describe parameters of marine habitats and understand the relationship of physical parameters to distribution of biota. 3. Use an understanding of research, laboratory and/or field experiences to organize data to illustrate and articulate basic ecological principles. 4. Use critical thinking to evaluate human impacts on marine ecosystems and to consider how local consumer and policy decisions can be informed by an understanding of the interconnectedness of marine habitats and the critical relationship of the sea to human cultures. Course Content: This CLO is addressed in depth because this course utilizes many modes of student communication of the various aspects of the material, in both lecture and laboratory. This content may be assessed utilizing one or more of the following activities: • Essay and multiple choice exams • Maintain a detailed field and laboratory notebook • Weekly applications of laboratory and field experiences • Self-assessment of group dynamics

2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 1. Use basic ecosystem principles to identify and understand the biology of various marine phyla and to characterize marine habitats. 2. Use scientific techniques to quantitatively describe parameters of marine habitats and understand the relationship of physical parameters to distribution of biota. 3. Use an understanding of research, laboratory and/or field experiences to organize data to illustrate and articulate basic ecological principles. 4. Use critical thinking to evaluate human impacts on marine ecosystems and to consider how local consumer and policy decisions can be informed by an understanding of the interconnectedness of marine habitats and the critical relationship of the sea to human cultures. Course Content This CLO is addressed in depth in this course as it is an innate aspect of science courses and this field of inquiry, Marine Biology, in particular, to utilize critical thinking and problem solving approaches to the material in lecture and laboratory activities. This includes critical thinking, research methods, history of research in the field, etc. being taught as part of the course content and is conveyed by the very nature of the laboratory activities, as well as through many of the assessment activities, including essay questions and self-assessment. This content may be assessed utilizing one or more of the following activities: • Essay and multiple choice exams • Maintain a detailed field and laboratory notebook • Weekly applications of laboratory and field experiences • Self-assessment of group dynamics
Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☒ in-depth ☐ minimally ☐ not addressed significantly	Outcomes: 2. Use scientific techniques to quantitatively describe parameters of marine habitats and understand the relationship of physical parameters to distribution of biota. 3. Use an understanding of research, laboratory and/or field experiences to organize data to illustrate and articulate basic ecological principles. Course Content: This CLO is addressed in depth because both lecture and laboratory utilize data to discuss and process the course content. This content may be assessed utilizing one or more of the following activities: • Homework assignments • Applications of laboratory experiences • Quizzes • Examinations

4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☒ in-depth ☐ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes 1. Use basic ecosystem principles to identify and understand the biology of various marine phyla and to characterize marine habitats. 4. Use critical thinking to evaluate human impacts on marine ecosystems and consider how local consumer and policy decisions can be informed by an understanding of the interconnectedness of marine habitats and the critical relationship of the sea to human cultures. Course Content This CLO is addressed in depth as human impacts on marine system are impacted by cultural differences, and many cultural differences can be traced to human interactions with the sea (e.g. Norse cultures and Native Pacific Northwest cultures). This content may be assessed utilizing one or more of the following activities: • Essay and multiple choice exams • Weekly applications of laboratory and field experiences
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☒ in-depth ☐ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes: 1. Use basic ecosystem principles to identify and understand the biology of various marine phyla and to characterize marine habitats. 2. Use scientific techniques to quantitatively describe parameters of marine habitats and understand the relationship of physical parameters to distribution of biota. 3. Use an understanding of research, laboratory and/or field experiences to organize data to illustrate and articulate basic ecological principles. 4. Use critical thinking to evaluate human impacts on marine ecosystems and to consider how local consumer and policy decisions can be informed by an understanding of the interconnectedness of marine habitats and the critical relationship of the sea to human cultures. Course Content This CLO is addressed in depth because the primary focus of this course is the consequences of human activity upon the natural world. Aspects of human activity on the social world are also covered in content such as the effects of social values on or relationships with the natural world. For example, the importance of endangered species and how society has responded to this challenge throughout history. This content may be assessed utilizing one or more of the following activities: • Essay and multiple choice exams • Maintain a detailed field and laboratory notebook • Weekly applications of laboratory and field experiences

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/31/18

Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/13/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Submission will be placed on the next agenda with available time slots. You will be notified of your submission's time for review. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 143	Course Title:	Habitats: Fresh Water Biology
Course Credits:	4	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Covers environments of freshwater streams, lakes, and marshes, emphasizing their organisms, as well as the biological interactions, nutrient cycles, and effects of physical and chemical factors on those organisms. Explores ecological factors of freshwater environments and the effects of human activities on them. Prerequisite: MTH 60 or equivalent placement test scores. Prerequisite/concurrent: WR 121. Audit available.		
Course Outcomes:	1. Use basic principles of ecosystems structure and function to characterize and evaluate freshwater habitats. 2. Identify and express how humans interact with the freshwater ecosystems by applying basic principles of environmental management. 3. Identify and understand the biology of the various freshwater phyla.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Core Learning Outcomes (CLO):**
   Through their respective disciplines, CGCC students who earn a degree can:
   1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
   2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
   3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)

4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 1. Use basic principles of ecosystems structure and function to characterize and evaluate freshwater habitats. 2. Identify and express how humans interact with the freshwater ecosystems by applying basic principles of environmental management. Course Content: This CLO is addressed in depth because this course utilizes many modes of student communication of the various aspects of the material, in both lecture and laboratory. This content may be assessed utilizing one or more of the following activities: • Scientific paper critiques or written freshwater habitat issue analyses. • Other oral presentations or special projects. • One or two mid-terms and a final exam: may include essay questions.
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 1. Use basic principles of ecosystems structure and function to characterize and evaluate freshwater habitats. 2. Identify and express how humans interact with the freshwater ecosystems by applying basic principles of environmental management. 3. Identify and understand the biology of the various freshwater phyla. Course Content This CLO is addressed in depth in this course, as it is an innate aspect of science courses and this field of inquiry, freshwater biology, in particular, to utilizes critical thinking and problem solving approaches to the material in lecture and laboratory activities. This includes critical thinking, research methods, history of research in the field, etc. being taught as part of the course content and is conveyed by the very nature of the laboratory activities, as well as through many of the assessment activities, including research papers. This content may be assessed utilizing one or more of the following activities: • One or two mid-terms and a final exam: may include essay questions.

	• Student project (group or solo) involving design of an analytical exercise, collection of data, and write-up in laboratory activities. • Freshwater biology scientific paper critiques or written aquatic issue analyses. • Other oral presentations or special projects. • Freshwater biology related laboratory and/or field experiences.
Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☒ in-depth ☐ minimally ☐ not addressed significantly	Outcomes: 2. Identify and express how humans interact with the freshwater ecosystems by applying basic principles of environmental management. 3. Identify and understand the biology of the various freshwater phyla. Course Content: This CLO is addressed in depth because both lecture and laboratory utilize data to discuss and process the course content. This content may be assessed utilizing one or more of the following activities: 1. Homework assignments 2. Applications of laboratory experiences 3. Quizzes 4. Examinations
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☒ in-depth ☐ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes 1. Use basic principles of ecosystems structure and function to characterize and evaluate freshwater habitats. 2. Identify and express how humans interact with the freshwater ecosystems by applying basic principles of environmental management. Course Content This CLO is addressed in depth as discussions around fisheries in the Pacific Northwest center upon cultural differences between Native practices versus European settler practices, arguments around the benefits versus costs of dams, and the differing interests of urban versus rural populations. This content may be assessed utilizing one or more of the following activities: • Short quizzes: short answer, multiple choice, true/false, and matching. • One or two mid-terms and a final exam: may include essay questions. • Student project (group or solo) involving design of an analytical exercise, collection of data, and write-up in laboratory activities. • Freshwater biology scientific paper critiques or written fisheries issue analyses. • Other oral presentations or special projects.
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☒ in-depth ☐ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes 1. Use basic principles of ecosystems structure and function to characterize and evaluate freshwater habitats. 2. Identify and express how humans interact with the freshwater ecosystems by applying basic principles of environmental management. 3. Identify and understand the biology of the various freshwater phyla.

	Course Content This CLO is addressed in depth because the primary focus of this course is the consequences of human activity upon the natural world. Aspects of human activity on the social world are also covered in content such as the effects of social values on or relationships with the natural world. For example, the importance of endangered species and how society has responded to this challenge throughout history. This content may be assessed utilizing one or more of the following activities: • Short quizzes: short answer, multiple choice, true/false, and matching. • One or two mid-terms and a final exam: may include essay questions. • Student project (group or solo) involving design of an analytical exercise, collection of data, and write-up in laboratory activities. • Freshwater biology scientific paper critiques or written fisheries issue analyses. • Other oral presentations or special projects. • Freshwater biology related laboratory and/or field experiences.

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/31/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/31/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Submission will be placed on the next agenda with available time slots. You will be notified of your submission's time for review. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 231	Course Title:	Human Anatomy and Physiology I
Course Credits:	4	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	First course of a three-course sequence. Introduces body systems, homeostasis, tissues, integument, skeletal and muscular systems. Includes related laboratories which integrate appropriate lab equipment and procedures: microscopes, dissection, and others as determined by the department and instructor. Prerequisites: BI 112 or BI 211. Audit available.		
Course Outcomes:	1. Work collaboratively, competently and ethically within a team of other health care professionals in subsequent clinical and academic programs in allied health sciences. 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to the integument, muscular and skeletal systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. 4. Use correct terminology to communicate anatomical features and physiological processes.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Core Learning Outcomes (CLO):**
   Through their respective disciplines, CGCC students who earn a degree can:
   1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)

2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 1. Work collaboratively, competently and ethically within a team of other health care professionals in subsequent clinical and academic programs in allied health sciences. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. 4. Use correct terminology to communicate anatomical features and physiological processes. The course requires reading science-based text and lab books as well as assigned literature. Writing is included via essay exams and written assignments. Speaking meaningfully about course content is encouraged in lecture and required in lab.
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to the integument, muscular and skeletal systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. Problem solving is addressed through laboratory exercises requiring efficient organization of time, proper use of materials and mastering of anatomical structure and function. Additionally, students are assigned scientific literature to evaluate and critically respond to (in writing).

Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☐ in-depth ☒ minimally ☐ not addressed significantly	Outcomes: 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to the integument, muscular and skeletal systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. Course Content: This content may be assessed utilizing one or more of the following activities: • Homework assignments • Applications of laboratory experiences • Quizzes • Examinations
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☐ in-depth ☐ minimally ☒ not addressed significantly	☐ no changes ☒ revised
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☐ in-depth ☐ minimally ☒ not addressed significantly	☒ no changes ☐ revised

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/31/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/31/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the

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CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 232	Course Title:	Human Anatomy and Physiology II
Course Credits:	4	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Second course of a three-course sequence. Introduces nervous, cardiovascular, lymphatic and immune systems. Includes related laboratories which integrate appropriate lab equipment and procedures: microscopes, dissection, and others as determined by the department and instructor. Prerequisites: BI 231 with a "C" or better. Audit available.		
Course Outcomes:	1. Work collaboratively, competently and ethically within a team of other health care professionals in subsequent clinical and academic programs in allied health sciences. 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to nervous, cardiovascular, and lymphatic and immune systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. 4. Use correct terminology to communicate anatomical features and physiological processes.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Core Learning Outcomes (CLO):**
   Through their respective disciplines, CGCC students who earn a degree can:
   1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)

2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised 1. Work collaboratively, competently and ethically within a team of other health care professionals in subsequent clinical and academic programs in allied health sciences. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. 4. Use correct terminology to communicate anatomical features and physiological processes. The course requires reading science-based text and lab books as well as assigned literature. Writing is included via essay exams and written assignments. Speaking meaningfully about course content is encouraged in lecture and required in lab.
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to nervous, cardiovascular, and lymphatic and immune systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. Problem solving is addressed through laboratory exercises requiring efficient organization of time, proper use of materials and mastering of anatomical structure and function. Additionally, students are assigned scientific literature to evaluate and critically respond to (in writing).
Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	

3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☐ in-depth ☒ minimally ☐ not addressed significantly	Outcomes: 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to the integument, muscular and skeletal systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. Course Content: This content may be assessed utilizing one or more of the following activities: 1. Homework assignments 2. Applications of laboratory experiences 3. Quizzes 4. Examinations
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☐ in-depth ☐ minimally ☒ not addressed significantly	☐ no changes ☒ revised
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☐ in-depth ☐ minimally ☒ not addressed significantly	☒ no changes ☐ revised

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/31/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/31/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.

CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 233	Course Title:	Human Anatomy and Physiology III
Course Credits:	4	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Third course of a three-course sequence. Introduces the respiratory, digestive, endocrine, urinary and reproductive systems. Includes related laboratories which integrate appropriate lab equipment and procedures: microscopes, dissection, and others as determined by the department and instructor. Prerequisites: BI 232 with a "C" or better. Audit available.		
Course Outcomes:	1. Work collaboratively, competently and ethically within a team of other health care professionals in subsequent clinical and academic programs in allied health sciences. 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to the respiratory, digestive, endocrine, urinary and reproductive systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. 4. Use correct terminology to communicate anatomical features and physiological processes.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*
2. **CGCC Core Learning Outcomes (CLO):**
   Through their respective disciplines, CGCC students who earn a degree can:

1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised 1. Work collaboratively, competently and ethically within a team of other health care professionals in subsequent clinical and academic programs in allied health sciences. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. 4. Use correct terminology to communicate anatomical features and physiological processes. The course requires reading science-based text and lab books as well as assigned literature. Writing is included via essay exams and written assignments. Speaking meaningfully about course content is encouraged in lecture and required in lab.
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to the respiratory, digestive, endocrine, urinary and reproductive systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. Problem solving is addressed through laboratory exercises requiring efficient organization of time, proper use of materials and mastering of anatomical structure and function. Additionally, students are assigned scientific literature to evaluate and critically respond to (in writing).

Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☐ in-depth ☒ minimally ☐ not addressed significantly	Outcomes: 2. Apply concepts and knowledge of general terminology, cell structure and function, gross anatomy, physiology, histology and terminology related to the integument, muscular and skeletal systems toward clinical problem solving. 3. Critically evaluate health articles and medical journals related to anatomy and physiology and examine the contexts of public health and broader social issues. Course Content: This content may be assessed utilizing one or more of the following activities: • Homework assignments • Applications of laboratory experiences • Quizzes • Examinations
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☐ in-depth ☐ minimally ☒ not addressed significantly	☐ no changes ☒ revised
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☐ in-depth ☐ minimally ☒ not addressed significantly	☒ no changes ☐ revised

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/31/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/31/18

NEXT STEPS:

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CC date _____
CC decision _____
CC vote _____

Columbia Gorge Community College

General Education/Discipline Studies List Request Form

(Double click on check boxes to activate dialog box)

1. General & Course Information:			
Department	Science	Submitter Name: Phone: Email:	Dan Ropek
Course Prefix and Number:	BI 324	Course Title:	Microbiology
Course Credits:	5	Gen Ed Category:	☐ Arts and Letters ☐ Social Science ☒ Science, Comp. Sci., and Math
Course Description:	Introduces microbial taxonomy, identification, morphology, metabolism and genetics. Explores bacterial, viral, and parasitic relationships with human health and disease. Laboratory stresses aseptic technique, bacterial identification and physiology using a variety of media, culturing techniques, and staining techniques. Prerequisites: BI 112 or BI 211. Audit available.		
Course Outcomes:	1. Relate an understanding of the basic principles of microbiology to personal health and use this understanding to make informed personal and professional decisions. 2. Use an understanding of the impact of microbes on human cultures around the world both historically and in the present day to evaluate current health issues. 3. Use scientific methods to qualitatively and quantitatively describe microbial characteristics and processes and understand their relationship to the identification of microbial species. 4. Use an understanding of research and laboratory experiences to organize, evaluate, and present data and information to illustrate and articulate basic microbiology concepts.		

Lower Division Collegiate (LDC) courses that apply for General Education/Discipline Studies status must:

1. **Be available to all CGCC students who meet the prerequisites for the course.**
2. **Ensure that the appropriate AAOT Discipline Studies outcomes and criteria are reflected in the course's outcomes.** (If you need to revise your course outcomes, you must complete a Course Revision form.)
3. **Verify course transfer status using the Course Transfer/Articulation Status form** (available on the curriculum website)**.** In order to obtain general education status, at least two OUS schools must confirm the course will transfer and one of the schools must approve the transfer as general education.
4. **Have the Standard Prerequisites unless the Department Chair has completed the Prerequisite Opt-Out form and that request is approved.**
5. **Be an LDC course that is eligible for the AAOT Discipline Studies List.**

In addition, course content must address the following:

1. **CGCC's General Education Philosophy Statement:** *Through a broad, well-balanced curriculum, the General Education program strives to instill a lifelong love of learning and to foster civic competence within our students.*

2. CGCC Core Learning Outcomes (CLO):

Through their respective disciplines, CGCC students who earn a degree can:

1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*)
2. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*)
3. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*)
4. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*)
5. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*)

Course outcomes and content are required, at a minimum, to demonstrate that CLOs 1 (*Communication*) and 2 (*Critical Thinking and Problem Solving*) are addressed in depth, and 1 additional CLO is addressed at least minimally.

2. Address CGCC Core Learning Outcomes:	
For each CLO addressed, provide the following: 1) list the course outcome(s) that clearly reflects the CLO; and 2) describe relevant course content, outlining how students will gain the skills and knowledge needed to achieve a level of mastery of the CLO. Please check the appropriate box, "no changes" or "revised," noting whether your response has changed since your last Gen Ed Request submission. Include previous response even if you are not making any revisions.	
Gen Ed designated courses are required to address CLOs 1 and 2 "in-depth."	
1. Communicate effectively using appropriate reading, writing, listening, and speaking skills. (*Communication*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes: 4. Use an understanding of research and laboratory experiences to organize, evaluate, and present data and information to illustrate and articulate basic microbiology concepts. Relevant Content: Lecture: Research Paper and Presentation covering content including: Describe and discuss specific microbial pathogens, life cycles, how they cause disease, treatment and protection Laboratory: Microbial identification capstone project, including research plan, microbial identification project, write-up, and presentation. These two separate research projects require students to research, plan, write, and give a spoken presentation, the first individually the second as a team.
5. Creatively solve problems by using relevant methods of research, personal reflection, reasoning, and evaluation of information. (*Critical Thinking and Problem-Solving*) ☒ in-depth **REQUIRED**	☒ no changes ☐ revised Outcomes 3. Use scientific methods to qualitatively and quantitatively describe microbial characteristics and processes and understand their relationship to the identification of microbial species. Relevant Content: Lecture: Discuss historical and continuing evolution of scientific understanding of microbiology, and the major contributions of various individuals Discuss the historical and contemporary classification systems used to identify biological organisms, emphasizing the role of microbes and microbial diversity Laboratory: Microbial identification capstone project, including research plan, microbial identification project, write-up, and presentation.

	The lecture content covers numerous historical and contemporary scientists and their experiments in the context of the knowledge as it stood at that time, discussing the approach to problem solving taken by these scientists, why they took that approach, and how their findings changed human perceptions of the world around them. Further, the students are required to plan and implement a laboratory examination, utilizing numerous methods to definitively (10 separate criteria from data they experimentally derive) identify an unknown microbe.
Provide a response for each of the following three CLOs that your course addresses. Gen Ed designated courses are required, at a minimum, to address one of these three "minimally" or "in-depth."	
4. Extract, interpret, evaluate, communicate, and apply quantitative information and methods to solve problems, evaluate claims, and support decisions in their academic, professional and private lives. (*Quantitative Literacy*) ☒ in-depth ☐ minimally ☐ not addressed significantly	Outcomes: 3. Use scientific methods to qualitatively and quantitatively describe microbial characteristics and processes and understand their relationship to the identification of microbial species. 4. Use an understanding of research and laboratory experiences to organize, evaluate, and present data and information to illustrate and articulate basic microbiology concepts. Course Content: This CLO is addressed in depth because both lecture and laboratory utilize data to discuss and process the course content. This content may be assessed utilizing one or more of the following activities: 1) Homework assignments 2) Applications of laboratory experiences 3) Quizzes 4) Examinations
5. Appreciate cultural diversity and constructively address issues that arise out of cultural differences in the workplace and community. (*Cultural Awareness*) ☐ in-depth ☒ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes: 2. Use an understanding of the impact of microbes on human cultures around the world both historically and in the present day to evaluate current health issues. Relevant Content: Discuss historical and continuing evolution of scientific understanding of microbiology, and the major contributions of various individuals Discuss microbial genetics, horizontal gene transfer, DNA damage and repair, recombinant DNA technology While the course emphasizes historical impacts of microbes, genetics, phylogenetics, and microbial diversity these concepts are merely relevant to cultural diversity, not directly addressing this topic.
6. Recognize the consequences of human activity upon our social and natural world. (*Community and Environmental Responsibility*) ☒ in-depth ☐ minimally ☐ not addressed significantly	☒ no changes ☐ revised Outcomes: 1. Relate an understanding of the basic principles of microbiology to personal health and use this understanding to make informed personal and professional decisions. 2. Use an understanding of the impact of microbes on human cultures around the world both historically and in the present day to evaluate current

	health issues. Relevant Content: Discuss historical and continuing evolution of scientific understanding of microbiology, and the major contributions of various individual Discuss the historical and contemporary classification systems used to identify biological organisms, emphasizing the role of microbes and microbial diversity Discuss microbial growth and metabolism, emphasizing physical/chemical influences and biochemical/genetic regulation Describe and discuss specific microbial pathogens, life cycles, how they cause disease, treatment and protection Discuss environmental and applied microbiology, and the role of microbes in our world The study of microbiology directly intersects with the study of human impacts on the natural world. Some examples would include eutrophication, nutrient cycling, sewage treatment, disease, acid mine drainage, toxic waste cleanup, and many, many more.

Section # 4 Department Review		
This proposal has been reviewed at the Director level and approved for submission.		
Department Chair	Email	Date
Dan Ropek	dropek@cgcc.edu	1/31/18
Department Director	Email	Date
Mary Kramer	mkramer@cgcc.edu	1/31/18

NEXT STEPS:

1. Save this document as the course prefix and course number.gened (e.g. HST 104.gened). Send completed form electronically to curriculum@cgcc.edu.
2. Complete the Course Signature form found in Forms on the curriculum website. Obtain required electronic or inked signatures and deliver to curriculum office by posted deadline. Refer to the curriculum office website for the Curriculum Committee meeting schedule and submission deadlines. You are encouraged to send submissions prior to the deadline so that the curriculum office may review and provide feedback.
3. Submission will be placed on the next agenda with available time slots. You will be notified of your submission's time for review. It is not mandatory that you attend the Curriculum Committee meeting in which your submission is scheduled for review; however, it is strongly encouraged that you attend so that you may represent your submission and respond to any committee questions. Unanswered questions may result in a submission being rescheduled for further clarification.

CLO designations for Gen Ed courses

To establish an intentional learning environment, Core Learning Outcomes require a clear definition of instructional strategies, evidence of recurrent instruction (and at least one assessable assignment), and employment of several assessment modes.

Major Designation:

1. The outcome is addressed recurrently in the curriculum, regularly enough to establish an enduring understanding.
2. Students can demonstrate and are assessed on a thorough understanding of the outcome.

Minor Designation:

1. The outcome is addressed adequately in the curriculum, establishing fundamental understanding.
2. Students can demonstrate and are assessed on a fundamental understanding of the outcome.