

# Rubric Statistics Report

Group Quiz Grading Criteria

Criteria	Novice	Competent	Proficient	Number Evaluation	Average	Median	Mode	Std. Deviation
Communication	Points 10.00 0%	20.00 20%	30.00 80%	5	28.00	30.00	30.00	4.47
Teamwork	Points 1.00 0%	5.00 0%	10.00 100%	5	10.00	10.00	10.00	0.00
Empirical & Quantitative Skills	Points 10.00 0%	20.00 20%	30.00 80%	5	28.00	30.00	30.00	4.47
Critical Thinking	Points 10.00 0%	20.00 80%	30.00 20%	5	22.00	20.00	20.00	4.47

Spring 2015; BIOL2402; Section 015

Online Anatomy & Physiology 2

# Rubric Statistics Report

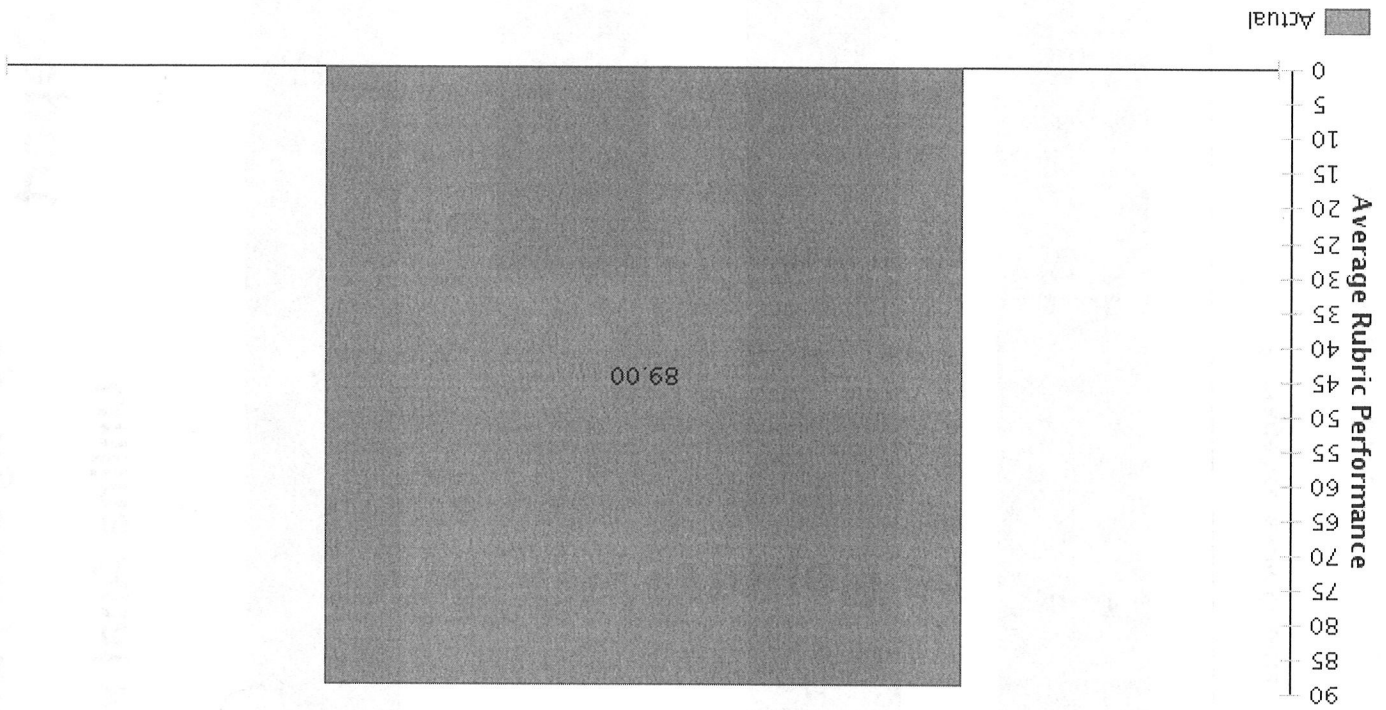
Report Sections Overview  
Rubric Overall Performance  
Rubric Analysis  
Frequency Distribution

## Overview

Current Instrument Name Group Assignment  
Rubric Name Group Quiz Grading Criteria  
Rubric Description  
Total Evaluations 5  
Begin Date Jan 1, 2001  
End Date Jan 1, 2020

## Rubric Overall Performance

Points Possible: 100.00



## Spring 2015; BIOL2402; Section 015 Online Anatomy & Physiology 2

For each course approved for core curriculum inclusion, provide the following information:

- a) Provide a link to or copy of your data results and/or a summation of your results for each required competency for each core curriculum course in your program.

Attached

- b) Did you meet your benchmark/target in each course? If not, do you need to adjust your benchmark or adjust the instruction to meet the benchmark?

met

- c) Provide information on your data collection strategy (e.g. each faculty member collected data, sampling of student work collected across sections used, etc.):

- d) Please explain how your results were evaluated (e.g. a team evaluated the data, data was collected from every student in the course via Blackboard, etc.):

data was collected on paper from every student

- e) How do you ensure your results are not biased and are reliable (i.e. inter-rater reliability)?

collections & identifications were quantitative, so reliability is a matter of fact (counting, identifying) presentation was assessed using rubric (attached)

- f) Please list the facts you feel contributed to your results (Analysis):

bacteria grow on agar

- g) How have you or will you improve student learning in each course based on the most recent assessment results?

I will work with students to more critically assess data & present in a scientific format

**CALL FOR COURSE PROPOSALS FOR INCLUSION INTO CORE CURRICULUM**

**To propose a course for inclusion into the AC General Education Course List (Core Curriculum) please complete the following areas of inquiry. Please review the description of the Core Objectives (General Education competencies) from the Texas Higher Education Coordinating Board.**

**Course under Consideration:** BIOL 2420/2320 Microbiology FOR Non-Science Majors

**Catalogue Description of the Course:**

Study of the morphology, physiology AND taxonomy of representative groups of pathogenic AND nonpathogenic microorganisms. Pure cultures of microorganisms grown ON selected media are used IN learning laboratory techniques. Includes a brief preview of food microbes, public health AND immunology.

**Foundational Component Area:** Life and Physical Sciences

**Course Student Learning Outcomes:**

1. Describe the major subdivisions of microbiology and describe the types of microorganisms in each division.
2. Compare prokaryotic and eukaryotic cells on the basis of size, organelles, chromosomal characteristics, reproductive characteristics and nutritional types.
3. Describe and define the function and basic chemical composition of various organelles.
4. Describe and give examples of the four types of biomolecules.
5. List the major characteristics of each kingdom of the biological world and viruses.
6. List and describe the various characteristics associated with life.
7. List and describe the major beneficial and destructive activities of the microbial members of each kingdom of the biological world.
8. Describe and compare the various chemical and physical methods used in microbial control.
9. Describe the etiology, pathogenesis, and treatments of major microbial diseases.
10. List and describe the body's lines of defense in resisting and/or combating disease causing microorganisms.
11. Explain what is meant by nosocomial infections and how to prevent nosocomial infections in patients.
12. Explain how to safeguard themselves and others from infectious disease.
13. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.
14. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.
15. Communicate effectively the results of scientific investigations.

<b>Communication Skills</b>	
Brief Description of Assignment and/or Activity to fulfill Course Objectives:	Students will each evaluate growth characteristics and biochemical responses of an unknown bacterium for the purpose of identification.
Direct Assessment Method As applied to above Assignment/Activity	Rubric,
Brief Outline of Assessment Method(s)	As one component of this activity, students will make a presentation on the significance of their identified bacterium to microbiology. The rubric for this portion of the activity is designed to measure effective presentation and communication skills. These include a demonstrated organization and delivery of content, and the use of appropriate sources, documentation, and visual design elements. Student artifacts will be submitted to the Assessment Committee.
Benchmark/Target:	60% of the students will effectively communicate the general characteristics of their identified bacterium. # 1
<b>Critical Thinking Skills</b>	
Brief Description of Assignment and/or Activity to fulfill Course Objectives:	Students will each evaluate growth characteristics and biochemical responses of an unknown bacterium for the purpose of identification.
Direct Assessment Method As applied to above Assignment/Activity	Rubric,
Brief Outline of Assessment Method(s)	As one component of this activity, students will provide a written explanation for justification of their choice in identifying the unknown bacterium. The rubric for this portion of the activity is designed to evaluate the reasoning ability of students, based on developed laboratory data, for species identification. Student written explanations will be provided to the Assessment Committee.
Benchmark/Target:	60% of the students will have developed the technical skills and reasoning ability to correctly identify an unknown sample of bacteria using critical thinking skills. # 2
<b>Empirical and Quantitative Skills</b>	
Brief Description of Assignment and/or Activity to fulfill Course Objectives:	Groups of 3-4 students will develop a scientific experiment to show the ubiquity of microorganisms.
Direct Assessment Method As applied to above Assignment/Activity	Rubric,

<p>Brief Outline of Assessment Method(s)</p>	<p>As one component of this activity, individual students will determine the numbers, diversity, and averaged values of their sampled microbes. They will compare their average abundance values with those of others of their group that sampled in the same locale. The rubric for this portion of the activity is designed to evaluate the primary data, each group's averages, and each group's comparisons to other groups. Student reports will be provided to the Assessment Committee.</p>
<p>Benchmark/Target:</p>	<p>60% of the student groups will have demonstrated the quantitative skills needed to acquire and effectively analyze experimental data.</p>
<p><b>Teamwork</b></p>	
<p>Brief Description of Assignment and/or Activity to fulfill Course Objectives:</p>	<p>Groups of 3-4 students will develop a scientific experiment to show the ubiquity of microorganisms.</p>
<p>Direct Assessment Method As applied to above Assignment/Activity</p>	<p>Rubric,</p>
<p>Brief Outline of Assessment Method(s)</p>	<p>As one component of this activity, student groups will design, describe, and implement an environmental sampling strategy. The rubric for this portion of the activity is designed to evaluate each group's ability to effectively sample environmental areas of interest. Student reports will be provided to the Assessment Committee.</p>
<p>Benchmark/Target:</p>	<p>60% of the student groups will demonstrate the ability to develop and carry out a common strategy for testing the ubiquity of microorganisms.</p>

#3

#3

Last Name First Name Username LAB [Total Pts: 100] | 378817



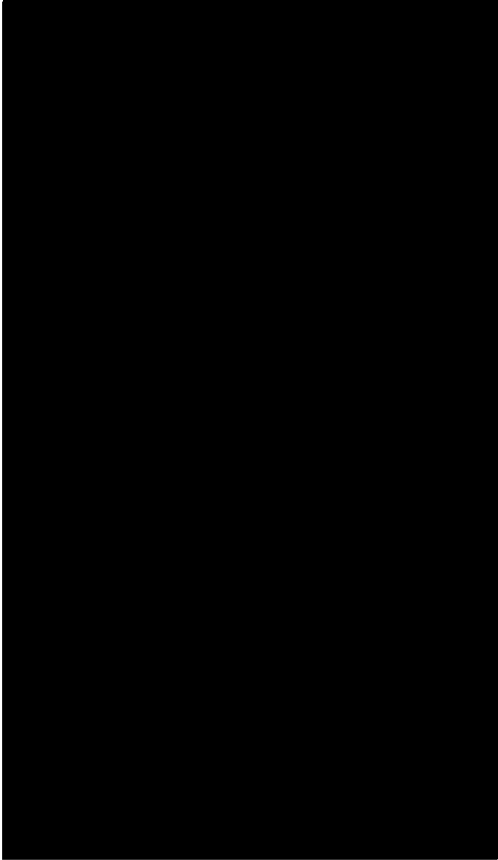
99	
99	
100	data sheets & written explanations returned to students
98	
100	
99	97.6% developed technical skills & reasoning ability to correctly id bacterium
100	
99	
0	- refused to attend class or participate
98	
100	
99	
99	
99	
100	
98	
99	
99	
99	
99	

#3 all students participated and succeeded in acquiring bacteria from the environment, isolated a particular one

100% student counted how many and how many kinds of bacteria they isolated

BAUMAN BIOL 2420 -009 2015 Sp

Last Name First Name Username LAB [Total Pts: 100] | 378775



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Grading rubrics for #1

Students made presentations of pathogens

97.6% of students effectively communicated the general characteristics  
(one student refused to participate)

85

Name: \_\_\_\_\_

Group Topic: \_\_\_\_\_

Individual Section: \_\_\_\_\_

**GRADING RUBRIC**

<b>ORGANIZATION AND CONTENT</b>	The presentation is missing key components, has no sequence, and is of poor quality 0-25	The presentation is informative, gets off sequence at times and is of good quality 40	The presentation is very informative, follows a logical sequence and is of high quality 50
<b>SUBJECT KNOWLEDGE</b>	The student does not have a good grasp of the subject matter and cannot intelligibly answer questions concerning the presentation 0-5	The student knowledge of the material is limited and is uncomfortable answering questions, but is able to provide very basic answers 10	The student demonstrates great knowledge of the material and answers questions clearly and elaborately 15
<b>VISUAL AIDS</b>	There are no pictures, charts, graphs or visual aids of any kind in the students section of the presentation 0-5	There are 1-2 visual aids in the student's section of the presentation 10	There is at least one visual aid per slide = 3-4 15
<b>GRAMMAR</b>	There are several spelling errors or grammatical errors in the presentation 0	There are a couple of spelling errors or grammatical errors in the presentation 5	There are no noticeable spelling errors or grammatical errors in the presentation 10
<b>GROUP WORK</b>	Student exhibited an inability to work with others in the group and did not share in the responsibilities 0	Student worked well with others in the group, but did not share equally in the responsibilities 5	Student worked well with others and shared equally in the responsibilities 10
<b>TOTAL SCORE</b>			

*Why blood culture only 5/10 +*  
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