



Planning and Evaluation Tracking

College Year: 2009-10

Division of: Science & Engineering

Person Responsible: Jack Stanley

Department of: Biology

Person Responsible: Michael Kopenits

Purpose Statement:

Goal Statements	Objectives/Outcomes (including assessment tools and standards)	Results	Use of Results (including improvements and revisions)
<p>1. Use critical analysis and scientific reasoning</p>	<p>1. A) Microbiology students will analyze and correctly identify a sample of an unknown bacteria. Upon completion of this course, 90% of students will correctly identify the unknown bacteria. B) Biology majors will demonstrate critical analysis by correctly answering a minimum of 70% of the embedded questions on the final exam. C) Anatomy & Physiology students will demonstrate critical thinking and scientific reasoning skills by completing appropriate case studies related to individual and / or related body systems.</p>	<p>1.A) Fall 2008 results: (186 / 208)89.8% of all students who completed the course correctly identified their unknown bacterium. Spring 2009 results: (189 / 200)89.5% of all students who completed the course correctly identified their unknown bacterium. B) Fall 2008 results: 63.4% of the students correctly answered the embedded questions. Spring 2009 results: 66% of the students correctly answered the embedded questions. C) Full time faculty have initiated the use of case studies on a participation based assessment for 2008 - 2009. Student involvement, motivation, and comprehension of case studies as it relates to future allied health studies increased dramatically as</p>	<p>1.. Analysis: A) While Microbiology met their goal within the standard deviation, we would like to increase this percentage. With our new laboratory facilities and equipment, we hope to increase student competency in completing and understanding clinical applications and competency. ACTION PLAN: Continue to use the assessment process and distribute the results to all microbiology faculty. Department chair and Micro faculty will discuss options for improved training and communication of skills necessary to complete unknown assessments via the scientific process. Implementing new pedagogical techniques from recent American Society of Microbiologists</p>

semester progressed.

conventions as means for improved instructor / student training and communication.

B) Majors biology results have decreased from previous academic year. The majors curriculum has been totally modified to meet current demands in field.

ACTION PLAN: Modify lecture and laboratory components to coordinate student assesment of complex biological theories. Continue to change curriculum as needed to meet demands of tranfer institutions for biology majors.

C) Case studies have proven to be an essential method of monitoring student's grasp of systemic interaction.

ACTION PLAN; Results to be distributed to all department faculty for incorporation of case studies into all biology curricula, if possible.

Department chair will provide case studies to all adjunct faculty and instruct them in their proper use.

Assesment of case studies will progress from participation to graded assesments as faculty become more

2. Increase student success and student demonstration of awareness and relevance of biology for future goals and career choices.

2.A) Upon completion of the selected course (Botany, Zoology, Life Science, Genetics, Majors Biology and Microbiology) students will demonstrate competency by correctly answering a minimum of 70% of the embedded questions on the comprehensive final exam.
B) Anatomy and Physiology students will be given a pre-test at the beginning of each course section and will demonstrate competency by correctly answering 70% of the questions on the comprehensive post-test prior to the final examination.

2. Microbiology results Fall 2008: 71.4% Spring 2009 results: 70.7%
B) A&P I post test results Spring 2009: 50.8%.
A&P II post test results Spring 2009: 60.1%.

familiar with use and integration. This will be a main objective of the department for the next two academic years.

2. ANALYSIS: While Micro met the overall goal, we will have all related faculty review course objectives to ensure that those areas that student deficiencies were apparent will be addressed for fall 2009.

If modifications to objectives are needed, all micro faculty will adjust syllabi as required.

LIFE SCIENCE: For the 2009-2010 academic year the entire curriculum will be updated to reflect the needs of non-biology majors. All full time faculty and adjuncts will be given instructions by department chair and additional opportunity for appropriate training as needed.

ANALYSIS (B) while the results of the post -test examination were below our expectations, the increase from pre-test to post-test were positive; API increased 9.5% and AP II

14%.

ACTION PLAN: Results of pre and post test will be distributed and evaluated by all full time faculty at fall pre-semester department meeting.

Changes to be discussed will include: 1) evaluation of all test questions for each course objective, 2) re-writing questions as needed to ensure course objectives are met and to establish that faculty are not teaching to the test, 3) review answers to all questions as previously submitted questions did not provide answers and correlation to objectives, 4) training by department chair for all adjunct faculty as to course objectives for both AP I and AP II to better meet the requirement of the assessments.

5) Establish improved assesment technique and evaluations for both traditional and on-line instructional formats

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revised 8/1/05