Course Assessment Report Washtenaw Community College

| Discipline | Course Number | Title |
| :--- | :--- | :--- |
| Biology | 142 | BIO 142 01/09/2019- <br> Fundamentals of Nutrition, <br> Exercise and Weight <br> Control |
| Division | Department | Faculty Preparer |
| Math, Science and <br> Engineering Tech | Life Sciences | Anne Heise |
| Date of Last Filed Assessment Report |  |  |

I. Review previous assessment reports submitted for this course and provide the following information.

1. Was this course previously assessed and if so, when?

No
2. Briefly describe the results of previous assessment report(s).
3.
4. Briefly describe the Action Plan/Intended Changes from the previous report(s), when and how changes were implemented.
5.

## II. Assessment Results per Student Learning Outcome

Outcome 1: Identify components of weight control.

- Assessment Plan
- Assessment Tool: Departmentally-determined questions
- Assessment Date: Winter 2016
- Course section(s)/other population: all
- Number students to be assessed: all
- How the assessment will be scored: item analysis
- Standard of success to be used for this assessment: 70\% of students will score at least $70 \%$.
- Who will score and analyze the data: department faculty

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

| Fall (indicate years below) | Winter (indicate years <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
| 2018 |  |  |

2. Provide assessment sample size data in the table below.

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 20 | 14 |

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

## Absence

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

There is only 1 section of this class. All students in this section were assessed.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Three short answer questions from Quiz 8. Answers were either right or wrong for each question.
6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes
Question 1: 7/14 correct.
Question 2: 14/14 correct
Question 3: 14/14 correct.
All in all: 35 of 42 (83\%) responses were correct
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.
$100 \%$ of students knew how many calories $=1 \mathrm{lb}$ of fat. $100 \%$ of students could name one factor affecting body weight that we as individuals CAN control.
8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Only 7/14 students answered this question correctly: "The $\qquad$ Equation compares energy intake to energy output to determine one's weight.

Probably this can be addressed easily during instruction, now that we know this is a problem.

Outcome 2: Analyze nutrition, exercise, and weight control relations.

- Assessment Plan
- Assessment Tool: Departmentally-determined questions
- Assessment Date: Winter 2016
- Course section(s)/other population: all
- Number students to be assessed: all
- How the assessment will be scored: item analysis
- Standard of success to be used for this assessment: 70\% of students will score at least $70 \%$.
- Who will score and analyze the data: department faculty

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

| Fall (indicate years below) | Winter (indicate years <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
| 2018 |  |  |

2. Provide assessment sample size data in the table below.

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 20 | 15 |

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

## Absences.

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

There is just 1 section of this class. All students in this section were assessed.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Three short-answer questions from the final exam were used to assess this outcome.
6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes
Question 1: 15/15 correct.
Question 2: 11/15 correct.
Question 3: 15/15 correct.
All in all 41/45 (91\%) of responses were correct.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.
$100 \%$ of students knew how many pounds of weight you should gain or lose when trying to change your weight.
$100 \%$ of students knew the name for a disorder where an individual has an addiction to exercise.
8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Only 73\% of students knew what BMI does NOT take into account in its measure of body fat. Perhaps more time can be spent on the calculation of BMI. Possibly some kind of drawing exercise could demonstrate what is and is not measured in the calculation of BMI.

Outcome 3: Design, monitor, and evaluate exercise and nutrition variables to achieve specific weight control outcomes.

- Assessment Plan
- Assessment Tool: Project portfolio
- Assessment Date: Winter 2016
- Course section(s)/other population: all
- Number students to be assessed: All students
- How the assessment will be scored: departmentally-developed rubric
- Standard of success to be used for this assessment: 70\% of students will score at least $70 \%$.
- Who will score and analyze the data: department faculty

1. Indicate the Semester(s) and year(s) assessment data were collected for this report.

| Fall (indicate years below) | Winter (indicate years <br> below) | SP/SU (indicate years <br> below) |
| :--- | :--- | :--- |
| 2018 |  |  |

2. Provide assessment sample size data in the table below.

| \# of students enrolled | \# of students assessed |
| :--- | :--- |
| 20 | 15 |

3. If the number of students assessed differs from the number of students enrolled, please explain why all enrolled students were not assessed, e.g. absence, withdrawal, or did not complete activity.

## Absences

4. Describe how students from all populations (day students on campus, DL, MM, evening, extension center sites, etc.) were included in the assessment based on your selection criteria.

There is just 1 section of this class. All students in this section were assessed.
5. Describe the process used to assess this outcome. Include a brief description of this tool and how it was scored.

Students did a Total Body Makeover Challenge. This outcome was assessed by using rubrics to evaluate 3 of the Objectives within the Total Body Makeover Challenge.
6. Briefly describe assessment results based on data collected for this outcome and tool during the course assessment. Discuss the extent to which students achieved this learning outcome and indicate whether the standard of success was met for this outcome and tool.

Met Standard of Success: Yes
Objective 6: 10-point rubric. Success defined as: 70\% of students will score 10/10 on this Objective. What happened: $12 / 15$ students ( $80 \%$ ) scored 10/10. Thus, SUCCESS!

Objective 8: Success on this Objective defined as: 70\% of students will record their workouts. What happened: 13/15 students (86\%) recorded their workouts. Thus, SUCCESS!

Objective 9: Success on this Objective defined as: 70\% of students will earn at least 28/40 points on the Write-Up component of the Total Body Makeover Challenge. What happened: $12 / 15(80 \%)$ students met the objective. Thus, SUCCESS!

Students were successful on each component of this outcome.
7. Based on your interpretation of the assessment results, describe the areas of strength in student achievement of this learning outcome.

Students do a Total Body Makeover Challenge in Bio 142. This includes establishing and defending weight control outcomes, complying with your chosen exercise plan, and evaluating the results. (These are the three objectives that were considered in the assessment of this Outcome.) Success was at least $80 \%$ on all three of these objectives.
8. Based on your analysis of student performance, discuss the areas in which student achievement of this learning outcome could be improved. If student met standard of success, you may wish to identify your plans for continuous improvement.

Based in part on this assessment, Katie Hamilton plans a substantial Master Syllabus Update to be completed during Spring/Summer 2019. Rather than guess what Katie is planning for this Outcome, I think it's more honest to say that she will be working on all aspects of the class.

## III. Course Summary and Intended Changes Based on Assessment Results

1. Based on the previous report's Intended Change(s) identified in Section I above, please discuss how effective the changes were in improving student learning.

## N/A

2. Describe your overall impression of how this course is meeting the needs of students. Did the assessment process bring to light anything about student achievement of learning outcomes that surprised you?

The Total Body Makeover Challenge is the capstone project for Bio 142. Given the very good performance on the Outcome related to the Total Body Makeover Challenge, I think the course is probably meeting student needs quite well.
3. Describe when and how this information, including the action plan, was or will be shared with Departmental Faculty.

Katie Hamilton will be working on a Master Syllabus Update over spring/summer 2019. I expect she will share her work with the department chair. At that point, the chair will wrestle it into an official Master Syllabus Update format in Curricunet.
4.

Intended Change(s)

| Intended Change | Description of the change | Rationale | Implementation Date |
| :---: | :---: | :---: | :---: |
| Other: numerous modifications may happen | Possibilities: modifications to quiz questions; rewrite the definition of "standard of success" in those cases where students are answering multiple test or quiz questions tied to a single Outcome; modifications to assignments. | This class is long overdue for assessment and syllabus update. Katie Hamilton plans to take a hard look at the class during spring/summer 2019. We will know more once she finishes that work. | 2019 |

5. Is there anything that you would like to mention that was not already captured?

Katie Hamilton is a part-time faculty who has been teaching Bio 142 for a long, long time. She is awesome. She worked with Anne Heise to plan the assessment. Katie collected and summarized all the data. Anne entered it into Curricunet, but a big tip of the hat goes to Katie.

## III. Attached Files

Bio 142 Qs and results

| Faculty/Preparer: | Anne Heise | Date: 01/09/2019 |
| :--- | :--- | :--- |
| Department Chair: | Anne Heise Date: 01/09/2019 |  |
| Dean: | Kristin Good Date: 01/14/2019 |  |
| Assessment Committee Chair: Shawn Deron Date: $03 / 12 / 2019$ |  |  |

