This procedure describes the steps to be followed for adjustment of Course grades, should an adjustment be deemed necessary. Course grade adjustments only apply for courses in OMS I and OMS 2 with numerically scored exams.

Burrell operational organization, and the direction of the Dean/CAO, gives the authority to adjust course grades to the Office of Curriculum Effectiveness and Evaluation in consultation with and approval by the Director of the course in question.

Course Directors/Clerkship Directors and Office of Curriculum Effectiveness and Evaluation - follow the procedure described below in determining whether any course adjustment is warranted, and to carry out adjustments when necessary. All Testing Center procedures regarding communication and implementation of decisions in the scoring of exams (individual exam items) will continue as currently described, and will be completed before course adjustments are considered, and will not affect the decision to adjust course grades.

Learning Management System (LMS) – The LMS is the on-line electronic program used to deliver Curriculum information, including grades, to the students enrolled in academic coursework.

Examination Item - a question prepared and submitted for use as part of a graded assessment tool (examination, test, quiz, or other).

Objective Borderline Method (OBM)-a model for setting up an objective pass/fail cut-off score. In OBM, scores are classified as Fail (F), Borderline (B), or Pass (P). The borderline range of scores is determined as described below. A rational decision is made about the borderline scores using a probability-based model and each score is reassigned either ‘F’ or ‘P’.

P-those scores that are a Pass without any doubt.
F-those scores that are a Fail without any doubt.
B-those scores where there is indecision as to whether the final grade should be a Pass or Fail.

Grade adjustments will be made to course grades, and not to individual assessment (quizzes, exams, etc.) grades. Thus, at the termination of a course, after all graded events have been scored, the outcomes will be reviewed by the Office of Curriculum Effectiveness and Evaluation, (or other authorized individual), in consultation with the Office of Pre-Clinical Education and the Course Director, and a determination made as to the propriety of making a course adjustment.

1. Determining Whether to Adjust Course Scores.
   1.1. Reviewing grade distribution.
   1.2. Course grades will be downloaded from the LMS gradebook system and reviewed.
      1.2.1. Review will include analysis of raw scores, calculated percent scores from raw score data, grade distribution (generation of a histogram) of percent scores, review of overall mean and standard deviation of course scores, and analysis of z-score values.
   1.3. All calculations to adjust course grades will be based on the percent score, calculated from raw point totals, earned by each student.
2. Process of Calculating grades using the OBM.
   2.1. Using downloaded course grades (from the LMS gradebook) the following data will be generated in the Excel spreadsheet:
      2.1.1. Total points available in course and total earned points by each individual student.
      2.1.2. Raw percent score (course score) for each student, calculated from “total earned points/total possible points”.
      2.1.3. Overall mean of course scores (raw percent scores) using the Excel “average” function.
      2.1.4. Standard deviation of course scores using the Excel “stdevp” function.
      2.1.5. Z-score is calculated using the formula $(x-\mu)/\delta$, where $x=$the student grade, $\delta=$the standard deviation, and $\mu=$the mean of course scores.

3. Determining Pass/Fail Cutoff Levels using Raw Data (Percent of Total Earned Points).
   3.1. The Borderline range of scores are defined as those falling between -1.5 and -2.0 standard deviations from the mean of the population scores.
   3.2. Once the range is determined, the number of P, F, and B scores are used in the formula $1-(B/(B+F))*(P/(P+B))$ to calculate a percentage of the borderline scores used to define the cut-off score.
   3.3. Multiplying the calculated percentage by the number of students in the borderline group defines the number of scores to count above the highest ‘F’ score to determine the cut-off score.
      3.3.1. The calculated number is rounded up (i.e. 2.36 would round up to 3, meaning the three lowest scores in the Borderline group would move to the Fail group.)
      3.3.2. In the event that multiple students have identical scores at the cut score point, or if the grouping of identical scores is excessively large, then the calculated number of Borderline scores may be rounded down, if deemed appropriate by the Course Director.
   3.4. One final course grades are submitted to the Registrar for posting per SOP AA.008 and CE.018, final course grades will be posted into the LMS gradebook as a P or F.
<table>
<thead>
<tr>
<th>Date</th>
<th>Title</th>
<th>Change Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>9/17/2018</td>
<td>8</td>
<td>moved to Academic Affairs and signed by Assistant Dean of Student Assessment</td>
</tr>
<tr>
<td>7/23/19</td>
<td>All</td>
<td>Update to change from Academic Affairs to Pre-Clinical Education; includes change in numbering (from AA to PCE)</td>
</tr>
<tr>
<td>8/19/2020</td>
<td>All</td>
<td>Update of adjustment methodology, maintenance responsibility moved to the Office of the Dean.</td>
</tr>
<tr>
<td>5/19/23</td>
<td></td>
<td>Updated Titles, Re-Classified under Academics and emphasized this SOP applies to OMS I and OMS 2</td>
</tr>
</tbody>
</table>