**Oakland University Assessment Committee**

**Assessment Plan Template**

**Step 1: Basic Information**

Program Name: **Master’s Degree in Clinical and Diagnostic Sciences**

School or College your program resides in: **School of Health Sciences**

Program Level (check all that apply):

Undergrad ☐

Master’s ☒

Doctoral ☐

Date Report Submitted: 05/21/20

Current Assessment Contact Representative (& E-mail): Dale Telgenhoff; dtelgenhoff@oakland.edu

Current Department or Program Chair (& E-mail): Sumit Dinda; sdinda@oakland.edu

Current Dean (& E-mail): Kevin Ball; kevinball@oakland.edu

**Step 2: Type of Assessment Plan**

**Option A.** Programs that have an external accrediting agency other than the Higher Learning Commission may be eligible to use their accreditor’s response in lieu of following the UAC’s standard process. These programs use the UAC’s ‘external accreditation mapping’ form instead of this form. For more information, please contact the UAC/OIRA liaison Reuben Ternes ([ternes@oakland.edu](mailto:ternes@oakland.edu)). Programs without external accreditation should proceed to option B.

**Option B**. If you are not accredited by an external body (or your accreditor’s standards do not meet the standards set by the Higher Learning Commission), then proceed to Steps 3-5 to create your assessment plan. Members of the UAC are always willing to work with individuals from any department to develop or revise their assessment plans. In addition, the Office of Institutional Research and Assessment (OIRA) has some very helpful tools for faculty and departments listed on their website ([www.oakland.edu/OIRA](http://www.oakland.edu/OIRA)). If at any time you have any questions, need any assistance, or would like to schedule a meeting with any UAC representatives, please contact the UAC and OIRA liaison, Reuben Ternes ([ternes@oakland.edu](mailto:ternes@oakland.edu)).

**Step 3: Aligning the OU Mission, Program Goals, Student Learning Outcomes, and Assessment Measures**

|  |  |  |  |
| --- | --- | --- | --- |
| (1) OU Mission | (2) Program Goals | (3) Student Learning Outcomes | (4) Assessment Measures |
| "…Oakland University advances knowledge…" | A. Graduates will display a mastery of clinical and diagnostic sciences. | 1. Explain the normal physiology of chemical constituents, formed elements, and microorganisms in the body and correlate their changes with potential disease states. | 70% of students will satisfactorily meet SLO1 in the following course: CDS 6300 (Molecular and Cellular Pathology) on assessment questions on the final exam tied to course objectives on normal and abnormal physiology and disease states and individually assessed using a rubric produced by the CDS Assessment Committee.1 |
|  |  | 2. Demonstrate knowledge of the effect that diagnostic data has upon patient care | 90% of students will satisfactorily meet SLO2 in the following course: CDS 6000 (CDS Capstone) by completing a capstone project which will address a problem or important issue in the healthcare profession on diagnostic data in patient care and individually assessed using a rubric produced by the CDS Assessment Committee. |
| "...engage students in distinctive educational experiences…valuable public service." | B. Graduates will critically analyze data by analyzing, reviewing, and interpreting data that are relevant to the demands of an advanced professional in clinical and diagnostic sciences, as appropriate, for each discipline. | 3. Evaluate quality control/assurance systems for established laboratory procedures to the extent that quality of output is assured | 90% of students will satisfactorily meet SLO3 in the following course: CDS 6000 (CDS Capstone) by including a quality assurance/quality control component to their capstone project and individually assessed using a rubric produced by the CDS Assessment Committee. |
|  |  | 4. Demonstrate critical thinking and problem solving when given a clinical case study or relevant information to a particular disorder | Students will satisfactorily meet SLO4 in the following course: CDS 5200 (Literature Review) by successfully completing a review of current literature as assessed by the grading rubric for the course with a grade of 70% or greater on the rubric.2 |
|  |  | 5. Successfully advance in current career through attainment of the degree | Students will meet SLO5 by indicating on alumni surveys any advancement in career associated with completion of the CDS MS degree.3 |
| "…student-engaged research…" | C. Graduates will apply knowledge of evidence-based practice to critically evaluate clinical case examples. | 6. Apply research principles to clinically relevant situations in diagnostic and biomedical sciences | 90% of students will satisfactorily meet SLO6 in the following course: CDS 6000 (CDS Capstone) by including research in clinically relevant areas to their capstone project and individually assessed using a rubric produced by the CDS Assessment Committee. |
|  | D. Graduates will participate in research projects or independent study designed to expand knowledge within the discipline. | 7. Work with faculty mentor to successfully complete research or independent study project | 100% of students will satisfactorily meet SLO7 by identifying a faculty mentor within the first year of the graduate program and satisfactorily complete an independent study or capstone project prior to graduation. |

**Step 4: Participation in Assessment Process**

|  |  |
| --- | --- |
| Who Will Participate in Carrying Out the Assessment Plan | What Will Be Their Specific Role/s |
| Graduate Program Director | Lead faculty meeting discussions, Curriculum review, Conduct Surveys, Survey data analysis, Reporting |

**Step 5: Plan for Analyzing and Using Assessment Results to Improve Program**

**Direct Measures**

1. Exam questions relating to objectives listed in each SLO in the indicated courses (see above) will be reported to the Graduate Program Director and analyzed for mastery of subject matter by the CDS MS Assessment Committee.
2. Capstone project to incorporate knowledge of the effect that diagnostic data has upon patient care, quality control/assurance systems for established laboratory procedures to the extent that quality of output is assured, and research principles to clinically relevant situations in diagnostic and biomedical sciences as assessed by the CDS MS Assessment Committee.
3. Correlation with performance in concentration/elective courses to admission to graduate or professional school (PhD, MD, DO, PA, DVM, PharmD, OD) provided by student feedback surveys.

**Indirect Measure**

1. A survey that is sent to alumni at 10 months post-graduation. The Assessment Coordinator summarizes the data for all survey items and distributes to faculty. This report is used to measure all program goals.

| Who Will Participate in Carrying Out the Assessment Plan | What Will Be Their Specific Role/s |
| --- | --- |
| All CDS faculty teaching assessed courses (CDS 5200, CDS 6000, CDS 6300) will be asked to provide randomized samples of student work from their sections during the assessment cycle. | Randomly select samples of the above-described assessments as relevant (5 per year) and provide these to the faculty assessment committee. |
| A faculty assessment committee, made up of 3 CDS graduate faculty (either full time or special instructors), will carry out the assessment. The committee will be led by the program coordinator. Faculty committee members will rotate each assessment cycle. | Evaluate individual student performance on the identified assessment assignments (per above) using enclosed rubrics; tabulate and analyze findings, including student surveys and faculty reports (per above); make recommendations for improvement (as needed). |
| M.S. in CDS Program Coordinator | Correspond with UAC; lead the CDS assessment committee; collect, organize and evaluate assessments; suggest changes to curriculum; disseminate findings from the assessment to faculty; work with faculty teaching assessed courses to adjust course content and delivery as necessary from assessment results. |
| Clinical and Diagnostic Sciences Department Chair | Review assessments results/report with program coordinator; make changes, as needed, to the curriculum with coordinator’s input. |

B. How will you use results to improve your program?

* 1. Data from the post-assessment exam are reviewed annually and discussed among full- and part-time CDS faculty to identify actions for program change.
  2. Student completed course evaluations are reviewed by individual faculty members and the program director. This is meant to help inform instructors of their teaching methodology/delivery.
  3. Surveys to alumni at 10 months post program completion and collected by the assessment coordinator. The Assessment Coordinator summarizes the data for all survey items and distributes to faculty.
  4. Curriculum review meeting to assess data compiled from the assessment coordinator to identify actions for program change.

Appendix: Assessment Measures Examples

SLO1: Explain the normal physiology of chemical constituents, formed elements, and microorganisms in the body and correlate their changes with potential disease states.

1. Describe molecular mechanisms and molecular diagnostic applications for the following diseases. Can you see any similarities between the molecular mechanisms underlying these diseases?
   1. Fragile X Syndrome
   2. Huntingtons Disease
   3. Cystic Fibrosis
   4. Hereditary Hemochromatosis
2. Describe the principle and clinical applications for the antigen receptor gene rearrangement assay for IgH and Igk.
3. Describe how the following factors affecting risk and risk assessment can influence hereditary disease:
   1. variable expressivity
   2. age of onset
   3. heterogeneity
   4. Mosaicism
   5. Factors outside of the critical gene

SLO4: Demonstrate critical thinking and problem solving when given a clinical case study or relevant information to a particular disorder

|  |  |  |  |
| --- | --- | --- | --- |
| Student Presenter: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ Date: \_\_\_\_\_\_\_\_\_\_\_\_\_\_Facilitator: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ | | | |
|  | Distinguished (9-10) | Proficient (7-8) | Basic (5-6) |
| **Organization** | Well organized  Introduces the purpose of the presentation clearly  Presented background information to understand context of paper  Key points well delineated  All information presented in a logical, progressive sequence  Ends with a clear summary of main points | Generally well organized  Introduces the purpose of the presentation  Some background  Key points delineated.  Most information presented in a logical, progressive sequence  Summary of the main points lacks complete clarity | Confusing or no introduction of the purpose of the presentation  Key points not delineated  Information presented in a confusing manner  Summary of main points different from presentation content |
|  | **Students Score (out of 10) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
|  | Distinguished (13-15) | Proficient (10-12) | Basic (7-9) |
| **Content: Depth and Accuracy Content** | Speaker provides an accurate/ complete explanation of key concepts/ theories, drawing upon relevant literature. Applications of theory are included to illuminate issues. | For the most part, explanations of concepts and theories are accurate and complete. Some helpful applications of theory are included. | Explanations of concepts and/or theories are inaccurate or incomplete. Little attempt is made to tie in theory |
| Introduction | **Students Score (out of 15) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| M&M | **Students Score (out of 15) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| Results | **Students Score (out of 15) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
| Conclusions | **Students Score (out of 15) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
|  | Distinguished (9-10) | Proficient (7-8) | Basic (5-6) |
| **Use of Communi-cation Aids** | Graphics designed to reinforce presentation thesis and maximize audience understanding  Excellent contrast & font size  Minimal but sufficient text. | Graphics aided presentation thesis  Font size is appropriate for reading  Sufficient text, could be edited without loss of comprehension | Superflous graphics, insufficient graphics  Font exhibited inappropriate contrast/size  Excessive text |
|  | **Students Score (out of 10) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
|  | Distinguished (9-10) | Proficient (7-8) | Basic (5-6) |
| **Use of Language: Grammar, Word Choice, Voice** | Poised, clear articulation; proper volume; correct pronunciation, steady rate; enthusiasm; confidence; speaker is clearly comfortable in front of the group.  Presentation has no misspellings or grammatical errors. | Clear articulation; pronunciation mostly correct, but not as polished; slightly uncomfortable at times  1 or 2 misspellings or grammatical errors involving less significant content | Audience occasionally has trouble hearing the presentation; incorrect word choices, grammatical errors, mispronuciations; seems uncomfortable.  1 or 2 misspellings or grammatical errors involving significant content |
|  | **Students Score (out of 10) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |
|  | Distinguished (9-10) | Proficient (7-8) | Basic (5-6) |
| **Audience Interaction, Questions and Answers** | Demonstrates extensive knowledge  of the topic by responding  confidently, precisely and  appropriately to all audience  questions | Demonstrates knowledge of the  topic by responding accurately and  appropriately addressing questions . At ease with answers to all questions but fails to elaborate | Demonstrates some rudimentary knowledge of topic but fails to answer completely |
|  | **Students Score (out of 10) = \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_** | | |

**Total Points: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_ (out of 100)**

SLO5: Successfully advance in current career through attainment of the degree

**Oakland University**

CDS MS Alumni Survey

2022

Instructions: Please provide the answers to the following questions in the space provided. Please do not include any identifying information (name, sex, etc.) on this form to insure confidentially. Information provided in this survey will be used for assessment purposes only. Thank you very much for your time!

1. When did you complete the OU CDS MS Program?
   1. 1-3 months ago
   2. 3-6 months ago
   3. 6-12 months ago
   4. 1-2 years ago
   5. >2 years ago
   6. Prefer not to answer
2. What is your current employment status?
   1. Full time
   2. Part time
   3. On-call (PRN)
   4. Other:
3. How has the OU CDS MS degree helped you in your career (select all that apply):
   1. Advancement in current position.
   2. Obtaining new position.
   3. Increased salary in position
   4. No change
   5. Other:
4. What is your current annual salary range as an MLT or MLS?
   1. Below $40,000
   2. $40,000-$60,000
   3. $60,000-$80,000
   4. $80,000-$100,000
   5. >$100,000
   6. I am not currently employed
5. If you changed positions, how would you rate your overall preparation at OU for your new position?
   1. Well prepared
   2. Adequately prepared
   3. Inadequately prepared
   4. Not at all prepared
   5. Not applicable
6. If you had to do it over, would you still choose the OU CDS MS Program?
   1. Yes
   2. No
7. Did you continue your education after graduation?
   1. Yes
   2. No
8. Did you continue your education by entering a professional program (DO, MD, DVM, PA, etc)?
   1. Yes
   2. No.

If yes, what program did you or will you complete? \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

1. Is there anything else you feel we should know about the program or your experiences in the program, or in your career?

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Thank you for your participation!

**Step 6: Submit Assessment Plan**

Send completed form electronically to [ternes@oakland.edu](mailto:ternes@oakland.edu).