**Program (Major, Minor, Core):** MS Applied Analytics Program  
**Department:**  
**College/School:** School for Professional Studies  
**Person(s) Responsible for Implementing the Plan:** Srikanth Mudigonda, Ph.D.  
**Date Submitted:** February 3, 2016

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| At the personal level, make sound, ethical decisions. | AA 5150 ORLD 5020 | **Direct Measures:**  
- Final Project (AA 5150, ORLD 5020)  
- Applied Analytics Project design and implementation (AA 5900, AA 5950)  
**Indirect Measures:**  
- Annual Review  
- Exit Survey | **See response to the 1st question below** |

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| At the personal level, practice evidence-based decision making. | AA 5150 AA 5300 ORLD 5030 | **Direct Measures:**  
- Final project (AA 5150, AA 5300, ORLD 5030)  
- Applied Analytics Project design and implementation (AA 5900, AA 5950)  
**Indirect Measures:**  
- Annual Review  
- Exit Survey | |
| At the interpersonal/group level, create and sustain a culture that promotes collaborative learning and performance across a diverse work environment. | AA 5250 ORLD 5010 | **Direct Measures:**  
- Final project (AA 5250, ORLD 5010)  
- Final project (ORLD 5030)  
**Indirect Measures:**  
- Annual Review  
- Exit Survey | |
| At the organizational level, apply a systems thinking framework in work settings. | ORLD 5010 AA 5250 AA 5900 AA 5950 | **Direct Measures:**  
- Final project (AA 5250, ORLD 5010)  
- Applied Analytics Project design and implementation (AA 5900, AA 5950)  
**Indirect Measures:**  
- Annual Review  
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<td>In the technological domain, demonstrate knowledge and understanding of essential facts, concepts, principles, and theories relating to analytics and its applications.</td>
<td>AA 5000&lt;br&gt;AA 5050&lt;br&gt;AA 5100&lt;br&gt;AA 5200&lt;br&gt;AA 5250&lt;br&gt;AA 5300&lt;br&gt;AA 5750&lt;br&gt;AA 5900&lt;br&gt;AA 5950</td>
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<td>In the technological domain, analyze, design, develop, and code modern software applications that address analytics-based science and industry issues</td>
<td>AA 5050&lt;br&gt;AA 5300&lt;br&gt;AA 5750</td>
<td><strong>Direct Measures:</strong>&lt;br&gt;o Final project (AA 5050, AA 5300, AA 5750)</td>
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<td>In the technological domain, examine and apply the principles of effective information organization and management to support knowledge discovery and dissemination.</td>
<td>AA 5050&lt;br&gt;AA 5100&lt;br&gt;AA 5200&lt;br&gt;AA 5900&lt;br&gt;AA 5950</td>
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| In the technological domain, demonstrate an ability to integrate effective the skills of inquiry, critical thinking, problem solving, and logical assessment. | AA 5250 AA 5300 ORLD 5030 AA 5900 AA 5950 | **Direct Measures:**  
  o Final project (AA 5250, AA 5300, ORLD 5030)  
  o Applied Analytics Project design and implementation (AA 5900, AA 5950)  
  **Indirect Measures:**  
  o Annual Review  
  o Exit Survey | |
| In the technological domain, understand and explain qualitative and quantitative dimensions of a situation through applied research. | ORLD 5020 ORLD 5030 AA 5900 AA 5950 | **Direct Measures:**  
  o Final project (ORLD 5020, ORLD 5030)  
  o Applied Analytics Project design and implementation (AA 5900, AA 5950)  
  **Indirect Measures:**  
  o Annual Review  
  o Exit Survey | |
| In the technological domain, analyze and evaluate the ethical considerations associated with the field of analytics. | AA 5000 AA 5150 ORLD 5020 AA 5900 AA 5950 | **Direct Measures:**  
  o Final project (AA 5000, AA 5150, ORLD 5020)  
  o Applied Analytics Project design and implementation (AA 5900, AA 5950)  
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**Program Learning Outcomes**

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| In the technological domain, develop the awareness to keep abreast of current trends and advances within the field of analytics. | AA 5300 AA 5750 | Direct Measures:  
- Final project (AA 5300, AA 5750)  
Indirect Measures:  
- Annual Review  
- Exit Survey | |

**How does the program use assessment results to recognize success and "close the loop" to inform additional program improvement? How/when is this data shared, and with whom?**

There are several mechanisms through which curriculum and operational matters are evaluated and action plans developed:

- An exit survey of soon-to-be-graduates will be used to determine students’ perceptions of how well the program’s learning objectives were met in each of the courses they have taken. A report is compiled with these data and is shared by the Graduate Program Director with the Associate Dean of Graduate Education, the Associate Dean of Learning Outcomes, and the Dean.
- Each student’s Applied Analytics Project along with her/his associated presentations is evaluated, using appropriate rubrics, to determine how well the projects and presentations demonstrate the achievement of the program’s learning outcomes. This information is collated with the data from the exit survey that soon-to-be-graduates complete to obtain a more holistic view of the achievement of the program’s learning outcomes. Any gaps that are identified are used to revise the individual courses where these learning outcomes are addressed, so as to ensure that, in the next iteration of the offering of these courses, the outcomes are operationalized in a more effective way.
- Students are required to complete an annual review in January of each year. A report comprising of the summary of the data from the annual review is compiled by the Graduate Program Director shared with the Associate Dean of Graduate Education, the Associate Dean of Learning Outcomes, and the Dean. This report provides a periodic (annual) summary of the progress made by students in the program, and their perceptions of how well the program’s learning objectives have been met in the coursework they have completed in the previous calendar year.
- The websites of all courses on Blackboard are evaluated by third parties to determine whether they conform to the standards associated with the design of course websites proposed by Quality Matters. For each course, the website-related review will be combined with the end-of-course evaluations provided by students taking the course to obtain a comprehensive evaluation of the
design and delivery of the course. A report will be compiled to include information about how well the learning outcomes associated with the course were operationalized via various course delivery mechanisms, how well the evaluation methods test the achievement of the learning outcomes, the students’ perceptions of how well the learning outcomes were achieved, and the faculty member’s perception of how well the learning outcomes were achieved. Any discrepancies/gaps will be identified and investigated to determine the steps that need to be taken to improve the course the next time it is offered. The report, prepared by the Graduate Program Director, will be shared with the faculty member teaching the course, with the Associate Dean for Graduate Education, and with the Associate Dean for Learning Outcomes.

- Frequent meetings take place among the Graduate Program Directors, the Associate Dean of Graduate Education, the Associate Dean of Learning Outcomes to discuss improvements on a continual basis.

1. **It is not recommended to try and assess (in depth) all of the program learning outcomes every semester. It is best practice to plan out when each outcome will be assessed and focus on 1 or 2 each semester/academic year. Describe the responsibilities, timeline, and the process for implementing this assessment plan.**

   Currently, the MS Applied Analytics is undergoing a program review. It is quite possible for the current set of program-level outcomes to be revised, and likely to be reduced to a smaller set. Consequently, the course-level learning outcomes may also change, to stay consistent with the changes to the overall program-level learning outcomes. An action plan will be created as part of the program review to determine the changes at the program-level and individual course-level that need to be made. As part of this process, changes will be made to the assessment process associated with each individual course and the overall program. This process of implementing the action plan will be a collaborative plan involving the Graduate Program Director, the faculty members teaching courses in the program, the Associate Dean of Graduate Education, and the Associate Dean of Learning Outcomes.

2. **Please explain how these assessment efforts are coordinated with Madrid (courses and/or program)?**

   N/A

3. **The program assessment plan should be developed and approved by all faculty in the department. In addition, the program assessment plan should be developed to include student input and external sources (e.g., national standards, advisory boards, employers, alumni, etc.). Describe the process through which your academic unit created this assessment plan. Include the following:**

   a. **Timeline regarding when or how often this plan will be reviewed and revised. (This could be aligned with program review.)**

      The MS AA program is undergoing a program review this year. One of the deliverables is an action plan with clear goals and timelines.

   b. **How students were included in the process and/or how student input was gathered and incorporated into the assessment plan.**

      Students’ feedback will be sought at the end of each course, at the beginning of each calendar year, if they have taken coursework during the previous calendar year, and at the of their final Applied Analytics Project course. The information thus obtained will be
used to identify areas of improvement to the various courses that are part of the program, and in the redesign and implementation of the courses in their next iteration.

c. **What external sources were consulted in the development of this assessment plan?**
   None.

d. **Assessment of the manageability of the plan in relation to departmental resources and personnel.**
   The operationalization of each program-level learning outcome within individual courses will be determined by the Graduate Program Director and the instructors of the courses. The assessment of the course-level learning outcomes will be done primarily by the instructors teaching them, under the advice of the Graduate Program Director. The Graduate Program Director will work, under the advice of the Associate Dean for Learning Outcomes, in assessing how well the overall program-level learning outcomes have been met by collating and evaluating the individual course-level assessments.