2010-2011 Annual Program Review
Curriculum and Instruction – Instructional Technology

I. Name of Program: Curriculum and Instruction: Instructional Technology

II. Reviewers: Dr. Donald Luck, Dr. Anne Wall

III. Program Description: This specialization is for persons wishing to provide leadership in instructional technology, for teachers who want to advance their teaching skills through the use of technology, or for those interested in preparing for work in a training environment. Completion of this degree does not require teacher licensure, nor does it lead to licensure in any area. The program addresses the selection, application, and evaluation of technology through classroom work and hands-on in the field projects. Graduates of the program work as technology leaders, trainers, and, teachers with improved technology skills.

This program uses the five Advanced Standards of the Association for Educational Communications and Technology (AECT) to design course content and key assessments. See the table below for alignment of key assessments with the standards. Each of these key assessments are evaluated in the classes indicated, and each of the standards is measured again in the Milestone III portfolio.

<table>
<thead>
<tr>
<th>Instructional Technology Standards</th>
<th>COURSES</th>
<th>KEY ASSESSMENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard I</td>
<td>5613</td>
<td>*Instructional Design Plan</td>
</tr>
<tr>
<td>Candidates demonstrate the knowledge, skills, and dispositions to design conditions for learning by applying principles, theories, and research associated with instructional systems design, message design, instructional strategies, and learner characteristics. Design is the process of specifying conditions for learning. The domain of design includes four sub-domains of theory and practice: Instructional Systems Design (ISD); Message Design; Instructional Strategies; and, Learner Characteristics</td>
<td>5617</td>
<td>Lesson Plans</td>
</tr>
<tr>
<td></td>
<td>5619</td>
<td>Training Project</td>
</tr>
</tbody>
</table>
| Standard II | Candidates demonstrate the knowledge, skills, and dispositions to develop instructional materials and experiences by applying principles, theories, and research related to print, audiovisual, computer-based, and integrated technologies. | 6005* 5618* 5614 5621 | *Capstone  
Personal Plan for Visual Literacy  
Brochure Document  
Website  
Video Lesson |
| Standard III | Candidates demonstrate the knowledge, skills, and dispositions to use processes and resources for learning by applying principles, theories, and research related to media utilization, diffusion, implementations, and policy-making. | 6005* 5611* | *Capstone  
Copyright/Fair Use Paper |
| Standard IV | Candidates demonstrate knowledge, skills, and dispositions to plan, organize, coordinate, and supervise instructional technology by applying principles, theories and research related to project, resource, delivery system, and information management. | 5611* | *Classroom Plan for Technology Integration |
| Standard V | Candidates demonstrate knowledge, skills, and dispositions to evaluate the adequacy of instruction and learning by applying principles of problem analysis, criterion-referenced measurement, formative and summative evaluation, and long-range planning. | 5625/5612 6005* 5613* | *Technology Plan  
*Capstone  
*Instructional Design Plan |

* Indicates required courses/required key assessments

IV. Changes in Program: In Spring 2011, we implemented a requirement that EDUC 6003, Seminar in Instructional Technology, be taken earlier in the program. This practicum class requirement was driven by the NCATE requirement that students should have an opportunity early in their program to gain experience in the field in their area of study. To make room in the
program for this requirement, EDUC 6005, the capstone class, was changed from three to two credit hours, and EDUC 6003, Practicum in Instructional Technology, a one-hour course, was included as a program requirement. Students are encouraged to enroll in EDUC 6003 early in their program. Students who are currently enrolled in the program are still eligible for a three hour 6005 course. All new students have been made aware of the early practicum requirement and are participating in the new requirement changes. We will evaluate the results of this change when data is available (i.e., Fall 2011).

V. Program Strengths: Based on 2010 - 2011 survey information, participants are satisfied with the program, giving a score of 2.67 out of a possible 3 for an overall evaluation of the program. The highest levels of satisfaction were in the areas of implementing curriculum plans that include methods and strategies for utilizing technology to maximize learning and in planning, designing and modeling effective learning environments and multiple experiences supported by technology.

Positions in Instructional Technology are being cut in school districts in the area due to budget constraints. Even with these cuts we continue to acquire new students. We believe that teachers recognize that this program provides a pathway for effectively integrating technology in their teaching, which improves their overall teaching effectiveness.

VI. Program Weaknesses: The lowest evaluated areas were in the development and implementation of technology infrastructure, procedures, policies, plans, and budgets for P-12 schools, application of technology to facilitate a variety of assessment and evaluation strategies and in seeking advice from others and drawing on education research scholarship to improve their practice. While these three areas were the lowest scoring, it must be noted the lowest score was a 2.5 on a 3 point scale where 2 was described as being prepared and 3 as being very prepared.

VII. Assessment of Candidates: Students must complete three milestones in the C&I IT program. The candidates are evaluated multiple times in multiple ways during the program, and these evaluations are used for determining progress through the milestones. Among the assessments used for evaluation are GPA, completion of a research course, an instructional design project, a technology integration plan, completion and oral presentation of a capstone project, and a review of the cumulative portfolio. Each of these assessments measures one or more of the AECT standards upon which the program is based.

- Milestone I is completed in the first term of enrollment when the students meet the requirements for admission to the graduate program (2.75 GPA, passing score on GRE, and three letters of recommendation).
- Milestone II must be completed before enrolling in the capstone course (EDUC 6005) and includes passing the research class as well as the other required and elective courses in the student’s individual program of study.
- Milestone III occurs at graduation when the student has successfully completed all coursework and related key assessments, the capstone project, and a summative portfolio measuring all the AECT standards.
The students’ GPAs are reviewed at each milestone, and as stated in the APSU Graduate Bulletin, students are in good standing if they maintain a GPA of 3.0 or higher. Students whose GPA falls below 3.0 will be placed on academic probation. If a student’s GPA falls below 3.0 for two consecutive semesters, they will be suspended from the program and the university.

The instructional design project is assessed in EDUC 5613, Instructional Design, a required course for all students in the program. This assessment measures AECT Standard 1: Candidates demonstrate the knowledge, skills, and dispositions to design conditions for learning by applying principles, theories, and research associated with instructional systems design, message design, instructional strategies, and learner characteristics. Design is the process of specifying conditions for learning. The domain of design includes four sub-domains of theory and practice:

- Instructional Systems Design (ISD)
- Message Design
- Instructional Strategies
- Learner Characteristics

This assessment also measures AECT Standard 5: Candidates demonstrate knowledge, skills, and dispositions to evaluate the adequacy of instruction and learning by applying principles of problem analysis, criterion-referenced measurement, formative and summative evaluation, and long-range planning. A satisfactory assessment of this project is required for students to pass Milestone III and graduate from the program. The chart below indicates students’ evaluations of the instructional design project in the 2010 - 2011 school year. All 27 students assessed made a satisfactory score on their instructional design projects.

<table>
<thead>
<tr>
<th>Date: 09/01/2010 - 09/20/2011</th>
<th>Milestone: All Scoring: All</th>
</tr>
</thead>
</table>

**Rubric:**

<table>
<thead>
<tr>
<th>Satisfactory (1 pts)</th>
<th>Unsatisfactory (0 pts)</th>
<th>Mean</th>
<th>Mode</th>
<th>Stdev</th>
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</thead>
<tbody>
<tr>
<td>Design</td>
<td>27</td>
<td>0</td>
<td>1.00</td>
<td>1</td>
</tr>
<tr>
<td>Evaluation</td>
<td>27</td>
<td>0</td>
<td>1.00</td>
<td>1</td>
</tr>
</tbody>
</table>

- **Design AECT.INS.1**
  - 27 (100%)
- **Evaluation AECT.INS.5**
  - 27 (100%)

A technology integration plan is the key assessment in EDUC 5611, Educational Computer Applications, a required course in the program. This assessment measures AECT Standard 3: Candidates demonstrate the knowledge, skills, and dispositions to use processes and resources for learning by applying principles, theories, and research related to media utilization, diffusion, implementations, and policy-making. This assessment also measures AECT Standard 4:
Candidates demonstrate knowledge, skills, and dispositions to plan, organize, coordinate, and supervise instructional technology by applying principles, theories and research related to project, resource, delivery system, and information management.

A satisfactory assessment is required for students to pass Milestone III and graduate from the program. The chart below indicates students’ evaluations of the technology integration plan in the 2010 - 2011 school year. All 15 students assessed made a target or acceptable score on their instructional design projects.

| Date:      | 06/01/2010 - 09/20/2011 |
| Milestone: | All Scoring: All         |

Rubric: Rubric

<table>
<thead>
<tr>
<th>Technology Integration Plan</th>
<th>Target (3 pts)</th>
<th>Acceptable (2 pts)</th>
<th>Unacceptable (1 pts)</th>
<th>Mean</th>
<th>Mode</th>
<th>Stdev</th>
</tr>
</thead>
<tbody>
<tr>
<td>13</td>
<td>2</td>
<td>1</td>
<td>2.87</td>
<td>3</td>
<td>0.34</td>
<td></td>
</tr>
</tbody>
</table>

A satisfactory assessment of the capstone project is required for students to pass Milestone III and graduate from the program. The chart below indicates students’ evaluations of the capstone project in the 2010 - 2011 school year. All nine students assessed made an exemplary or target score on their capstone projects.

The students’ capstone project is assessed in EDUC 6005, Instructional Technology Project. This assessment measures AECT Standard 2:
Candidates demonstrate the knowledge, skills, and dispositions to develop instructional materials and experiences by applying principles, theories, and research related to print, audiovisual, computer-based, and integrated technologies.

This key assessment also measures AECT Standard 3:
Candidates demonstrate the knowledge, skills, and dispositions to use processes and resources for learning by applying principles, theories, and research related to media utilization, diffusion, implementations, and policy-making.

This key assessment also measures AECT Standard 5:
Candidates demonstrate knowledge, skills, and dispositions to evaluate the adequacy of instruction and learning by applying principles of problem analysis, criterion-referenced measurement, formative and summative evaluation, and long-range planning.

A satisfactory assessment of the capstone project is required for students to pass Milestone III and graduate from the program. The chart below indicates students’ evaluations of the capstone project in the 2010 - 2011 school year. All nine students assessed made an exemplary or target score on their capstone projects.
Completion of a cumulative program portfolio is required of each student. Eight students were assessed on their final portfolio in 2010-2011. All students scored at the Exceeds or Meets level on all five of the AECT standards. Based on the portfolio evaluations, candidates did well in all areas. The two weakest standards are Standard 2, Development, and Standard 5, Evaluation. Standard 2 is assessed in two required courses in the program, EDUC 5618, Visual Literacy, and EDUC 6005, Instructional Technology Project. A renewed focus on the development of technology-based learning materials will take place in these courses, which could impact future assessments. Standard 5 is also addressed in two required courses, EDUC 5613, Instructional Design, and EDUC 5618, Instructional Technology Project. Both courses have a significant evaluation piece, and instruction in that area will be targeted for improvement in future class sections.
VIII. Assessment of Program Operations: Data indicates an overall satisfaction with the program. Even the weakest area scores are well above acceptable levels. Enrollment has remained consistent, graduating eight students in the last year. The program is geographically expanding and students are entering the program from locations further from the APSU campus. This expansion has caused a few issues when students defend their capstone projects, but the use of technology such as Skype and online file sharing tools has supported these distance learners.

In the spring semester of 2011, we noticed a decline in the enrollment of students in our summer courses. An intentional marketing of our program to area teachers through email, Facebook, and our Web site led to the enrollment of 12-15 new students enrolled in our summer cohort.

IX. Summary of Proposed Changes: A change to the assessment system beginning with the 2011-2012 school year is that we will no longer using cumulative portfolios in our program. In the spring of 2011, we decided to move from assessing students’ portfolios to a standards-based report system. At the culmination of each student’s program, a standards report will be completed in LiveText for that student, indicating the level at which the student met the standards each and every time they were assessed. This will provide a more holistic picture of student progress through the program than does a stand-alone portfolio. It also eliminates the need for the creation of a portfolio containing artifacts created in the classes, when the standards can now be measured directly from those course assessments.

We are emphasizing the creation of cohorts again this year to make scheduling of courses, specifically practicum and capstone, more efficient. We are considering only offering practicum and capstone twice a year as actual classes rather than independent study courses as has been done in the past.
We will send email fliers out to schools again next spring and expand the areas to which they are sent with the intent of beginning a new cohort of 15 to 20 students in the summer. Larger numbers could be supported in the cohorts. An additional emphasis in these fliers will be on improving overall teaching with technology. This focus may help increase numbers in the program.

X. Assessment System: While creating this report, we have recognized several problems with our assessment system. The first problem is that the rubric for the EDUC 5613 key assessment, the instructional design project, provides limited information because it only contains two levels of scoring (satisfactory and unsatisfactory). Everyone who passed the assignment received a satisfactory, but this did not give us enough specific information about student achievement. The rubric for EDUC 5611 contains three scoring levels (target, acceptable, and unacceptable) and the capstone project rubric in EDUC 6005 contains four levels (exceeds, meets, developing and unacceptable). These inconsistencies make it difficult to compare data across key assessments. To remedy this situation, the rubrics will be modified to contain four levels, making them consistent with the other rubrics resulting in clearer data with which to plan course and program improvements.