## UNDERGRADUATE PROGRAM LEARNING OUTCOMES (2016-17)

### BS-LEARNING, CULTURE, & TECHNOLOGY

1. Analyze educational problems and define requirements for appropriate solutions
2. Design, implement, and evaluate computer-based systems, processes, or modules to meet desired needs
3. Analyze the local and global impact of computing on learning in and outside of schools
4. Evaluate and assess emerging technologies, e.g., assistive technologies, mobile applications, simulations, and online assessment tools
5. Engage in field-based learning experiences, e.g., a Co-op with an e-portfolio and an internship that demonstrates reflective practices
6. Demonstrate an understanding of ethical, social, and cultural issues associated with education and technology
7. Develop knowledge and skills in design-based research activities, methods, and projects
8. Develop collaboration and management skills necessary for leading design and implementation projects

### BS-ELEMENTARY EDUCATION: PK -4

1. **Professionalism:** Upon completion of the program, the teacher candidate is able to:
   b) Demonstrate leadership in the classroom, school community, and profession that is focused on positive and innovative change.
   c) Seek ongoing professional growth and development in the field to improve practice.
   d) Demonstrate a growth mindset, and take responsibility for student learning and academic growth.
   e) Partner with parents in the education of their children.

2. **Diversity:** Upon completion of the program, the teacher candidate is able to:
   a) Use culturally responsive pedagogy to create equitable learning experiences for all students.
   b) Use critical self-reflection to understand one's own identity in the context of a classroom of diverse learners.
   c) Create an inclusive classroom environment with high expectations for all learners.

3. **Reflective Practice:** Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate the ability to self-reflect on his or her professional practice.
   b) Use data and classroom based evidence to inform and improve professional practice.

4. **Pedagogical Content Knowledge:** Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate strong content knowledge in all subject areas that are developmentally appropriate and aligned with NAEYC standards and program outcomes
   b) Deliver effective developmentally informed instruction that is culturally and linguistically sensitive to the children in the class.
   c) Use appropriate means of ongoing assessment that is developmentally appropriate and sensitive to the unique capabilities of young children, and utilize assessment information to make appropriate modifications to the curriculum that will demonstrate children's progress and ensure optimal learning opportunities for all children.
   d) Integrate tools of technology in teaching and learning that are appropriate for the developmental levels of children and that expand, enrich, implement, individualize, differentiate, and extend the overall curriculum.
   e) Construct well-written, research-based developmentally appropriate lesson plans that reflect active teaching and learning.
5. **Classroom Climate**: Upon completion of the program, the teacher candidate is able to:
   a) Create a safe, positive and productive learning environment that supports and facilitates learning for all students.
   b) Build a sense of community in a collaborative climate, based on developmentally appropriate pro-social skills, where students work collaboratively and have a shared sense of ownership.

6. **Developmentally Appropriate Practice**: Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate a thorough understanding of child and/or adolescent development and the learning sciences.
   b) Use differentiated instruction to meet the diverse learning needs of one’s students.
   c) Use developmentally informed teaching practices

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### BS-TEACHER EDUCATION: SECONDARY MATHEMATICS 7-12

1. **Professionalism**: Upon completion of the program, the teacher candidate is able to:
   b) Demonstrate leadership in the classroom, school community, and profession that is focused on positive and innovative change.
   c) Seek ongoing professional growth and development in the field to improve practice.
   d) Demonstrate a growth mindset, and take responsibility for student learning and academic growth.

2. **Diversity**: Upon completion of the program, the teacher candidate is able to:
   a) Use culturally responsive pedagogy to create equitable learning experiences for all students.
   b) Use critical self-reflection to understand one’s own identity in the context of a classroom of diverse learners.

3. **Reflective Practice**: Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate the ability to self-reflect on his or her professional practice.
   b) Use data and classroom based evidence to inform and improve professional practice.

4. **Pedagogical Content Knowledge**: Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate strong knowledge of mathematics content, practices, and pedagogy, meeting PDE requirements.
   b) Deliver effective instruction using high leverage teaching practices with emphasis on problem-solving, multiple representations and multiple solution paths.
   c) Use appropriate means of ongoing assessment, and utilize data, including student-produced artifacts, to demonstrate student growth and make appropriate modifications to the curriculum.
   d) Integrate tools of technology in teaching and learning for individual and group work.
   e) Construct well-written, research-based, engaging lesson plans that connect to the relevant content and practice standards and include opportunities to engage students at multiple levels.

5. **Classroom Climate**: Upon completion of the program, the teacher candidate is able to:
   a) Create a safe, positive and productive learning environment that supports and facilitates learning for all students.
   b) Build a sense of community in a collaborative climate, based on developmentally appropriate pro-social skills, where students work collaboratively and have a shared sense of ownership.

6. **Developmentally Appropriate Practice**: Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate a thorough understanding of child and/or adolescent development and the learning sciences.
   b) Use differentiated instruction to meet the diverse learning needs of one’s students.
   c) Use developmentally informed teaching practices
### BS-TEACHER EDUCATION: SECONDARY SCIENCE 7-12
(Biology, Chemistry, Earth & Space, General Science and Physics)

1. **Professionalism:** Upon completion of the program, the teacher candidate is able to:
   b) Demonstrate leadership in the classroom, school community, and profession that is focused on positive and innovative change.
   c) Seek ongoing professional growth and development in the field to improve practice.
   d) Demonstrate a growth mindset, and take responsibility for student learning and academic growth.
   e) Partner with parents in the education of their children.

2. **Diversity:** Upon completion of the program, the teacher candidate is able to:
   a) Use culturally responsive pedagogy to create equitable learning experiences for all students.
   b) Use critical self-reflection to understand one’s own identity in the context of a classroom of diverse learners.
   c) Create an inclusive classroom environment with high expectations for all learners.

3. **Reflective Practice:** Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate the ability to self-reflect on his or her professional practice.
   b) Use data and classroom based evidence to inform and improve professional practice.

4. **Pedagogical Content Knowledge:** Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate strong knowledge of science content, practices, and pedagogy in specific science related subject areas that meet PDE content requirements.
   b) Deliver effective instruction using high leverage teaching practices with emphasis on inquiry-based learning experiences.
   c) Use appropriate means of ongoing assessment, and utilize data, including student produced 5E Lessons, to demonstrate student growth and make appropriate modifications to the curriculum.
   d) Integrate tools of technology in teaching and learning in both the laboratory and classroom.
   e) Construct well-written, research-based, engaging lesson plans within the framework of the Next Generation Science Standards (NGSS).

5. **Classroom Climate:** Upon completion of the program, the teacher candidate is able to:
   a) Create a safe, positive and productive learning environment that supports and facilitates learning for all students.
   b) Build a sense of community in a collaborative climate, based on developmentally appropriate pro-social skills, where students work collaboratively and have a shared sense of ownership.

6. **Developmentally Appropriate Practice:** Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate a thorough understanding of child and/or adolescent development and the learning sciences.
   b) Use differentiated instruction to meet the diverse learning needs of one’s students.
   c) Use developmentally informed teaching practices

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### BS-TEACHER EDUCATION: SECONDARY SOCIAL STUDIES 7-12

1. **Professionalism:** Upon completion of the program, the teacher candidate is able to:
   b) Demonstrate leadership in the classroom, school community, and profession that is focused on positive and innovative change.
   c) Seek ongoing professional growth and development in the field to improve practice.
   d) Demonstrate a growth mindset, and take responsibility for student learning and academic growth.
   e) Partner with parents in the education of their children.

2. **Diversity:** Upon completion of the program, the teacher candidate is able to:
   a) Use culturally responsive pedagogy to create equitable learning experiences for all students.
   b) Use critical self-reflection to understand one’s own identity in the context of a classroom of diverse learners.
   c) Create an inclusive classroom environment with high expectations for all learners.

3. **Reflective Practice:** Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate the ability to self-reflect on his or her professional practice.
   b) Use data and classroom based evidence to inform and improve professional practice.
4. **Pedagogical Content Knowledge**: Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate strong content knowledge in all subject areas that meet PDE content requirements, specifically related to history, civics, citizenship, anthropology, sociology and government.
   b) Deliver effective instruction using high leverage teaching practices, which allow candidates to assist 7-12 students to build upon evidence-based and expository writing in the social sciences.
   c) Use appropriate means of ongoing assessment, and utilize data to demonstrate student growth and make appropriate modifications to the curriculum.
   d) Integrate tools of technology in teaching and learning.
   e) Construct well-written, research-based, engaging lesson plans aligned with the Common Core Standards for Social Studies and the National Council for which build knowledge through content-rich expository texts.

5. **Classroom Climate**: Upon completion of the program, the teacher candidate is able to:
   a) Create a safe, positive and productive learning environment that supports and facilitates learning for all students.
   b) Build a sense of community in a collaborative climate, based on developmentally appropriate pro-social skills, where students work collaboratively and have a shared sense of ownership.

6. **Developmentally Appropriate Practice**: Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate a thorough understanding of child and/or adolescent development and the learning sciences.
   b) Uses differentiated instruction to meet the diverse learning needs of one’s students.
   c) Use developmentally informed teaching practices.

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**CERTIFICATION-Dragons Teach Middle Years**
*Grades 4-8 (Math, Science, and English and Language Arts)*

1. **Demonstrate cultural awareness about oneself and others in order to build authentic, caring relationships with students, families, and the community.** Upon completion of the program, the teacher candidate is able to:
   a) Use culturally responsive pedagogy to create equitable learning experiences for all students.
   b) Cultivate assets-based, authentic relationships with students and their families that foster investment in achievement.
   c) Invest time in knowing individual students and form relationships to best support their learning.
   d) Reflect on one’s own identity in relation to students, colleagues, and the school community and on the dynamics between self and others.
   e) Leverage students as leaders in developing systems and procedures for creating a safe, respectful and engaging learning space.
   f) Empower students to develop content and learning opportunities that is reflective of their cultures.
   g) Cultivate students’ awareness of multiple career opportunities inside and outside their communities, and the pathways to achieve them.

2. **Actively display a professional growth mindset that incorporates inquiry based project management**: Upon completion of the program, the teacher candidate is able to:
   a) Demonstrate the ability to self-reflect on his or her professional practice.
   b) Use data and classroom based evidence to inform and improve professional practice.
   c) Actively seek feedback and purposefully reflect on own development.
   d) Seek ongoing professional growth and development in the field to improve practice.
   e) Take responsibility for student learning and academic growth.
   f) Demonstrate leadership in the classroom, school community, and profession that is focused on positive and innovative change.
   g) Make ethical, sound decisions based on Pennsylvania Professional Code of Conduct.
   h) Plan and utilize systemized, tiered probing questions that push students to go deeper in their responses and truly own the academic load.
   i) Implements learning activities that allow all students to think, speak, and/or write using academic language of the lesson.
   j) Leverage student relationships and personal knowledge of students’ aspirations to build investment in challenging academic work.
3. **Plan and facilitate rigorous, aligned content instruction:** Upon completion of the program, the teacher candidate is able to:

- a) Demonstrate strong knowledge of content, practices, and pedagogy in specific subject areas that meet PDE content requirements.
- b) Deliver effective instruction using high leverage teaching practices with emphasis on inquiry-based learning experiences.
- c) Use appropriate means of ongoing assessment, and utilize data, including student produced 5E Lessons, to demonstrate student growth and make appropriate modifications to the curriculum.
- d) Integrate tools of technology in teaching and learning in both the laboratory and classroom.
- e) Clearly communicate a well-framed, standards-aligned and appropriately rigorous objective to describe the goal(s) of the lesson.
- f) Use daily lesson activities that are well sequenced and move students toward mastery of grade-level standards.
- g) Accurately check for whether students understand the key content needed to master the lesson at key moments in the lesson (e.g., during direct instruction, before independent practice, at a transition and with an exit ticket at the end of a lesson).
- h) Develop and/or use informal and formal assessments that yield usable data on students’ progress toward grade-level standards.
- i) Provide feedback that affirms correctly understood content and student progress toward the lesson objective and clarifies misunderstood content.
- j) Recognize the root of student errors and re-teaching or re-framing content to address the underlying cause of student misunderstanding.
- k) Appropriately select, evaluate and adapt curriculum materials as needed to ensure all students engage meaningfully with the content and are able to attain learning goals.
- l) Differentiate instruction as needed in response to learning needs, including enrichment and extra support.
- m) Consider students’ IEP goals and other specific learning needs in developing learning goals and preparing lessons and providing accommodations and modifications as needed.
- n) Understand adolescent development and adapt instruction to meet their socio-emotional needs.

4. **Set and maintain high behavioral expectations for students:** Upon completion of the program, the teacher candidate is able to:

- a) Create a safe, positive and productive learning environment that supports and facilitates learning for all students.
- b) Build a sense of community in a collaborative climate, based on developmentally appropriate pro-social skills, where students work collaboratively and have a shared sense of ownership.
- c) Exude a strong teacher presence that results respectful student behavior and students consistently engaged in learning.
- d) Provide and reinforce specific, concrete, sequential, and observable directions for behavior and academic participation in the lesson.
- e) Address all off-task or inappropriate student behavior immediately, respectfully, and in a way that does not slow or disrupt lesson momentum.
- f) Appropriately decide on and issue logical consequence as needed, such that consequences are successful in changing student behavior.
- g) Reinforce positive behaviors through language and systems of incentives.