CIEP Program Report Submission Form

Middle-Level General Science (4-8)

(for Educator Preparation Chapter adopted 8-12-2021)

The CIEP form for Middle-Level Teaching Fields must also be submitted.

Institution Name:
Date Submitted:

Program Level: *Select one of the options below.*

☐Class B
☐Alternative Class A

Submitting for: *Choose one of the options below.*

☐Initial review of a proposed program
☐Continuing review of a currently approved program
☐Resubmission to address unmet standards and/or conditions

Overview of Each Required Section:

I. **Background Information:** Provide background information about the program (checklist; numbers of admissions, completers, and recommendations for certification). The "n"s reported here are used to determine if "n"s reported in data tables are consistent.

II. **Key Assessments, Data, and Data Analysis:** Provide an overview of the key assessment in the Section II chart. Key Assessments are typically summative assessments of candidate proficiencies. For each key assessment, included the completed coversheet; assessment instrument, instructions, or test specification information; rubric or scoring guide; and data table(s). Program faculty preparing submissions should use the Rubric for Key Assessments.

III. **Alignment of Standards to Curriculum and Key Assessments:** Provide an overview of how the program ensures each indicator is adequately addressed in curriculum and key assessments so reviewers know where to look to for evidence. Reviewers use the course descriptions and assessment documents, not the chart, to determine whether each indicator is adequately addressed.

IV. **Summary of Field Experiences Prior to Internship:** Provide an overview of how the program requires candidates to demonstrate developing proficiencies in field experiences prior to internship. Copies of instructions or assignments must be submitted. Assessment information is not required but may be submitted. Field experiences should have clear purposes and reflect increasing expectations. Program faculty preparing submissions should use the Rubric for Field Experiences Prior to Internship.

SECTION I Background Information

1. **Include the proposed checklist as a separate document.**

2. **Data on Unconditional Admissions, Program Completers, and Certificates Issued**
   Programs should report at least three years of data. If the "n" over three years is less than 10, the program should report five years of data.

Academic Year September 1 to August 31	**Number of Unconditional Admissions**	**Number of Program Completers**[1]	**Number Recommended for Alabama Certification**

[1] Use the Title II definition for program completers.

SECTION II Key Assessments, Data, and Data Analysis

1. *Assessments #1-#5 are required. No more than eight key assessments may be submitted.*
2. *Complete a coversheet for each key assessment and attach it to the instrument or instructions, or test specifications; rubric or scoring guide; and data tables(s). Submit these documents in a Key Assessments folder on the flash drive and a section of the binder.*

#	Key Assessment Title	Name of Key Assessment[2]	Type of Key Assessment[3]	When Required by Program[4]
1 a	**State Certification Tests:**[5] **Praxis Middle School Science**		State Certification Tests	
1 b	**edTPA**			
2	**Content Knowledge**[6]			
3	**Planning Instruction**[7]			
4	**Internship**			
5	**Effect on Student Learning**[8]			
6[9]				
7				
8				

[2] Identify assessment by title used in the program.
[3] Types of assessment include but are not limited to essay, case study, project, comprehensive exam, reflection, state certification test, and portfolio.
[4] Assessments might be required at the time of admission to the program, admission to internship, during a required course, or at program completion.
[5] Test data must include the percentage of candidates who passed the tests for the last three years. Total scores and appropriate sub-test data must be reported.
[6] Examples of appropriate content knowledge assessments include grade analyses, comprehensive examinations, portfolio tasks, and culminating performances.
[7] Examples of appropriate assessments for planning instruction include developing lesson or unit plans that address the breadth and depth of the teaching field, individualized education plans, needs assessments, or intervention plans.
[8] Examples of appropriate assessments for effect on student learning include those based on samples of student work, portfolio tasks, case studies, and appropriate follow-up studies.
[9] Examples of optional assessments addressing program standards include but are not limited to evaluations of field experiences, case studies, specific portfolio artifacts, complete portfolios, and follow-up studies.

SECTION III Alignment of Standards to Curriculum and Key Assessments

Identify the curriculum components and key assessments listed in Section II that address the standard and indicators. Only courses that directly address indicators should be listed. In most cases, an indicator will be addressed by more than one key assessment. Cross-references to the standards and indicators should be inserted into the assessment instruments, scoring guides, and data tables.

Standard 1 Content Knowledge.
Effective teachers of science understand and articulate the knowledge and practices of contemporary science and engineering. They connect important disciplinary core ideas, crosscutting concepts, and science and engineering practices to include knowledge of physical sciences, life sciences, and Earth and space sciences to be taught according to the *Alabama Course of Study: Science*. Candidates will:

Indicators	**Curriculum Components—Courses or Other Requirements**[10] *(Include course prefix, number, and name.)*	**Key Assessment(s)** *(Identify by key assessment number[s] in Section II.)*
1.1 Use and apply the major concepts, principles, theories, laws, and interrelationships of general science and supporting fields.		
1.2 Explain the nature of science and the cultural norms and values inherent to the current and historical development of scientific knowledge.		
1.3 Demonstrate knowledge of crosscutting concepts, disciplinary core ideas, practices of science and engineering, the supporting role of science-specific technologies, and contributions of diverse populations to science.		
1.4 Demonstrate knowledge of how to implement science standards, learning progressions, and sequencing of science content for teaching their middle-level students.		

Standard 2 Content Pedagogy.
Effective teachers of science plan learning units of study and equitable, culturally-responsive opportunities for *all* students based upon their understanding of how student learn and develop science knowledge, skills, and habits of mind. Effective teachers also include appropriate connections to science and engineering practices and crosscutting concepts in their instructional planning. Candidates will design lessons:

Indicators	**Curriculum Components—Courses or Other Requirements** *(Include course prefix, number, and name.)*	**Key Assessment(s)** *(Identify by key assessment number[s] in Section II.)*
2.1 Using the *Alabama Course of Study: Science*, science standards and a variety of appropriate, student-centered, and culturally-relevant science disciplinary-based instructional approaches that follow safety procedures and incorporate science and engineering practices, disciplinary core ideas, and crosscutting concepts.		
2.2 Incorporating appropriate differentiation strategies, wherein *all* students develop conceptual knowledge and an understanding of the nature of science. Lessons should engage students in applying science practices, clarifying relationships, and identifying natural patterns from empirical experiences.		
2.3 Using engineering practices in support of science learning wherein *all* students design, construct, test and optimize possible solutions to a problem.		
2.4 Aligning instruction and assessment strategies to support instructional decision making that identifies and addresses student misunderstanding, prior knowledge, and naïve conceptions.		
2.5 Integrating science-specific technologies to support *all* students' conceptual understanding of science and engineering.		

Standard 3 Learning Environments.

Effective teachers of science are able to plan for engaging *all* students in science learning by identifying appropriate learning goals that are consistent with knowledge of how students learn science and are aligned with standards. Plans reflect the selection of phenomena appropriate to the social context of the classroom and community, and safety considerations, to engage students in the nature of science and science and engineering practices. Effective teachers create an anti-bias, multicultural, and social justice learning environment to achieve these goals. Candidates will:

Indicators	**Curriculum Components—Courses or Other Requirements** *(Include course prefix, number, and name.)*	**Key Assessment(s)** *(Identify by key assessment number[s] in Section II.)*
3.1 Plan a variety of lesson plans based on science standards that employ strategies that demonstrate their knowledge and understanding of how to select appropriate teaching and motivating learning activities that foster an inclusive, equitable, and anti-bias environment.		
3.2 Plan learning experiences for *all* students in a variety of environments (e.g., the laboratory, field, and community).		
3.3 Plan lessons in which *all* students have a variety of opportunities to investigate, collaborate, communicate, evaluate, learn from mistakes, and defend their own explanations of scientific phenomena, observations, and data.		

Standard 4 Safety. Effective teachers of science demonstrate biological, chemical, and physical safety protocols in their classrooms and workspace. They also implement ethical treatment of living organisms and maintain equipment and chemicals. Candidates will:		
Indicators	**Curriculum Components—Courses or Other Requirements** *(Include course prefix, number, and name.)*	**Key Assessment(s)** *(Identify by key assessment number[s] in Section II.)*
4.1 Implement activities appropriate for the abilities of *all* students that demonstrate safe techniques for the procurement, preparation, use, storage, dispensing, supervision, and disposal of all chemicals/materials/equipment used.		
4.2 Demonstrate an ability to: recognize hazardous situations including overcrowding; implement emergency procedures; maintain safety equipment; provide adequate student instruction and supervision; and follow policies and procedures that comply with established state and national guidelines, appropriate legal state and national safety standards (e.g., OSHA, NFPA, EPA), and best professional practices (e.g., NSTA, NSELA).		
4.3 Demonstrate ethical decision-making with respect to safe and humane treatment of all living organisms in and out of the classroom and comply with the legal restrictions and best professional practices on the collection, care, and use of living organisms.		

Standard 5 Impact on Student Learning. Effective teachers of science provide evidence that students have learned and can apply disciplinary core ideas, crosscutting concepts, and science and engineering practices as a result of instruction. Effective teachers analyze learning gains for individual students, the class as a whole, and subgroups of students disaggregated by demographic categories, and use these to inform planning and teaching. Preservice teachers will:		
Indicators	**Curriculum Components—Courses or Other Requirements** *(Include course prefix, number, and name.)*	**Key Assessment(s)** *(Identify by key assessment number[s] in Section II.)*
5.1 Implement assessments that show *all* students have learned and can apply disciplinary knowledge, nature of science, science and engineering practices, and crosscutting concepts in practical, authentic, and real-world situations.		
5.2 Collect, organize, analyze, and reflect on formative and summative evidence and use those data to inform future planning and teaching.		
5.3 Analyze science-specific assessment data based upon student demographics, categorizing the levels of learner knowledge, and reflect on results for subsequent lesson plans.		

Standard 6 Professional Knowledge and Skills. Effective teachers of science strive to continuously improve their knowledge of both science content and pedagogy, including approaches for addressing inequities and inclusion for *all* students in science. They identify with and conduct themselves as part of the science education community. Candidates will:		
Indicators	**Curriculum Components—Courses or Other Requirements** *(Include course prefix, number, and name.)*	**Key Assessment(s)** *(Identify by key assessment number[s] in Section II.)*
6.1 Engage in critical reflection on their own science teaching to continually improve their instructional effectiveness.		
6.2 Participate in professional development opportunities to deepen their science content knowledge and practices.		
6.3 Participate in professional development opportunities to expand their science-specific pedagogical knowledge.		

SECTION IV Summary of Field Experiences Prior to Internship

1. **List all courses (or other curriculum requirements) that have a required field experience, in the order that the courses are typically taken.** ***Include the course prefix, number, and title.***

Course Prefix	Course Number	Course Title

2. **Are field experiences always done in this order?** ☐**Yes** ☐**No**
   If no, provide a brief explanation.

3. **Briefly explain how placements are made to ensure that candidates are placed in diverse schools.**

4. **For each field experience, complete a field experience coversheet and attach it to the instructions or assignments for the field experience. Submit these in a Field Experience folder on the flash drive and a section in the binder.**