



Program Review Document

Preparation Program: GSKyTeach

Secondary Education for Initial Certification, Master of Arts in Teaching

Date Submitted: *May 2017*

Certification Level:	<input type="checkbox"/> B-P <input type="checkbox"/> P-5 <input type="checkbox"/> 5-9 <input type="checkbox"/> 5-12 <input checked="" type="checkbox"/> 8-12 <input type="checkbox"/> P-12
Preparation Level:	<input checked="" type="checkbox"/> Initial
Modes of Delivery:	<input type="checkbox"/> Face-to-Face Only <input type="checkbox"/> Online Only <input checked="" type="checkbox"/> Hybrid
Degree Type:	<input type="checkbox"/> Undergraduate <input checked="" type="checkbox"/> Graduate (MAT) <input type="checkbox"/> Undergraduate – Cert Only <input type="checkbox"/> Option 6
Program Codes:	0495
University Catalog:	https://www.wku.edu/undergraduatecatalog/ http://catalog.wku.edu/graduate/
WKU Quality Assurance Document:	http://www.wku.edu/cebs/caep/

SYLLABI: All Professional Education, Methods Syllabi, and a Sampling of Content Area Syllabi are available on the WKU website http://www.wku.edu/cebs/peu/epsb_prds.php.

Program Description

GSKyTeach: Unique Features and Modes of Delivery

This is not an Option 6 alternative certification program whereby students hold a temporary provisional certificate. GSKyTeach is a graduate level residency program designed to guide physics, chemistry, and mathematics majors to become teachers in a unique partnership between Western Kentucky University and Jefferson County, (Louisville) Kentucky public schools. This concentration would be applicable to other partner organizations. GSKyTeach is an innovative program that prepares science and mathematics majors for an initial teaching endorsement through an alternative route to certification program. Graduate resident interns (GRIs), are prepared to teach in high-needs high schools using inquiry based methods of teaching and learning. GRIs attend a six week summer preparation program with both didactic and clinical field experiences. During the fall and spring semesters, GRIs teach alongside a mentor teacher four days per week as interns in a high-needs high school in Jefferson County Public Schools. Both the mentor teacher and the intern receive coaching and guidance from GSKyTeach master teachers. One day per week, Western Kentucky University GSKyTeach faculty travel to Jefferson County to deliver graduate coursework to the GRIs. At the conclusion of the one year preparation program, GRIs complete their school residency requirement and graduate coursework leading to a Master of Arts in Teaching and receive teacher certification in their respective content areas. Graduates then enter the Kentucky Teacher Internship Program and begin fulfillment of a three year teaching commitment as a mathematics, chemistry or physics teacher in a high-needs Jefferson County high school.

GSKyTeach: Rationale for the Program

GSKyTeach was developed specifically in response to national initiatives to prepare more students for careers in science, technology, engineering, and mathematics (STEM). The goal of GSKyTeach is to improve teacher quality and schooling in communities designated as high-needs and to provide better opportunities for students to reach their highest academic potential despite barriers to their physical, mental and academic development.

Course Descriptions

▪ **Core Education Courses**

SMED 501 Designing Instructional Sequences in Secondary Math and Science. Theory and practice of designing and delivering high quality inquiry-based math and science instruction. Students explore and practice the guided inquiry process, create lesson plans, and implement lessons with secondary students.

SMED 510 Advanced Topics in Knowing and Learning in Mathematics and Science. Exploration of essential questions specifically relevant to teaching mathematics and science. Standards for knowing, how they are used, and how what is known changes and develops.

SMED 520 Management for Positive Learning Environments. Application of learning theories in instructional settings with diverse student populations. Emphasizes productive, positive classroom management for teaching and learning.

SMED 530 Literacy Support for Diverse Learners in Mathematics and Science. Designing literacy instruction for diverse learners in mathematics and science.

SMED 560 Developing Professional Learning Communities for Instructional Improvement. Students form secondary professional learning communities with Mentor and Master Teachers and analyze student performance data to improve teaching/learning.

SMED 589 Science and Mathematics Education Internship Seminar. Connects theory to practice by helping students complete teaching tasks that demonstrate performance related to Kentucky's New Teacher Standards.

SMED 590 Teaching Internship. Supervised student teaching experience across fall and spring semesters in off-campus site.

SMED 620 Collaborative Research to Improve Mathematics and Science Teaching. Development of skills needed to design and develop a data based action research project to be implemented during the semester.

SMED 630 Action Research Seminar. Students present results of instructional innovation and develop conclusions about practice or process implemented in secondary math or science classrooms.

▪ **Core Content Courses**

Students enrolled in the GSKyTeach program have earned bachelor's degrees in physics, chemistry, or mathematics or have completed sufficient undergraduate coursework in one of these three areas for Kentucky teacher certification. Therefore, GSKyTeach students are not required to complete additional core content courses.

1. INITIAL PREPARATION EARLY FIELD AND CLINICAL EXPERIENCES: The table below delineates the alignment between program courses and the EPSB required categories for early field and clinical experiences.

Course Name	Hours	School Level			EPSB REQUIRED EXPERIENCES CATEGORIES							
		ELEM	MIDDLE	HIGH	a. Engage with diverse students	b. Observe in Family Resource or Youth Services Center	c. Tutor	d. Interact with student families	e. Attend school board	e. Attend school-based council	f. Participate in professional learning community	g. Assist teacher/ other school professionals
SMED 501	50	X	X	X	X	X		X	X	X		X
SMED 510	40		X		X	X		X			X	X
SMED 520	20		X	X	X	X	X					X
SMED 530	40		X	X	X	X					X	X
SMED 560	50		X	X	X					X		X
Total Hours	200											

Note: Memorandums of Agreement with P-12 school partners are located under the CAEP Standard 2 link: <http://www.wku.edu/cebs/caep/>.

2. KENTUCKY TEACHER PERFORMANCE STANDARDS ALIGNMENT: The table delineates how the EPP-wide Initial Preparation Key Assessments, aligned to both Kentucky Teacher Performance and InTASC Standards, are embedded in the program.

KEY ASSESSMENTS					
AREA		NAME	STANDARD ALIGNMENT		COLLECTED
			KTS	InTASC	
1	Content Assessment	Praxis II	(1)*	(4,5)	Praxis Report
2	Other Content Assessment	Major GPA	(1)	(4)	Prior to Student Teaching
3	Assessment of Professional Capabilities	Praxis PLT	(2-10)	(1-3,6-10)	Praxis Report
4	Clinical Experiences Measure of Teaching Proficiency	Student Teacher Evaluation	1-10	1-10	SMED 589
5	Measure of Assessment Proficiencies	A: Learning Goals & Pre/Post Assessment B: Analysis of Student Learning	1-3,5-7	1-10	SMED 510
6	Ability to Diagnose and Prescribe for Personalized Student Learning	Design for Instruction	1,2,5,6	1,4-10	SMED 520
7	Application of Content Knowledge and Pedagogical Skills	Teacher Work Sample	1-3,5-7,9	1-10	SMED 589
8	Assessment of Literacy Outcomes	Operational Stance Concerning Content-Area and Discipline-Specific Literacies	1,2,5	1,4-7	SMED 530
9	Dispositions	Dispositions Form	NA	NA	SMED 589, SMED 520
10	KTS Exit Survey	KTS Exit Survey	1-10	1-10	SMED 589

*Assessments are theoretically aligned to standards; however, results cannot be disaggregated into distinct standards for reporting and analysis.

COURSE EXPERIENCES ADDRESSING LEARNED SOCIETY (SPA) STANDARDS: The table below delineates the alignment between program courses and the appropriate SPA standards.

SPA Standard # and Description	Course Alignment										
	SME D 501	SMED 510	SMED 520	SMED 530	SMED 560	SMED 620/630	SMED 590	SMED 589			
National Science Teachers Association											
Standard 1: Content Knowledge Effective teachers of science understand and articulate the knowledge and practices of contemporary science. They interrelate and interpret important concepts, ideas, and applications in their fields of licensure	x						x	x			
Standard 2: Content Pedagogy Effective teachers of science understand how students learn and develop scientific knowledge. Preservice teachers use scientific inquiry to develop this knowledge for all students.	x						x	x			
Standard 3: Learning Environments Effective teachers of science are able to plan for engaging all students in science learning by setting appropriate goals that are consistent with knowledge of how students learn science and are aligned with state and national standards. The plans reflect the nature and social context of science, inquiry, and appropriate safety considerations. Candidates design and select learning activities, instructional settings, and resources--including science-specific technology, to achieve those goals; and they plan fair and equitable assessment strategies to evaluate if the learning goals are met.	x		x	x	x		x	x			
Standard 4: Safety Effective teachers of science can, in a P-12 classroom setting, demonstrate and maintain chemical safety, safety procedures, and the ethical treatment of living organisms needed in the P-12 science classroom appropriate to their area of licensure	x						x	x			
Standard 5: Impact on Student Learning Effective teachers of science provide evidence to show that P-12 students' understanding of major science concepts, principles, theories, and laws have changed as a result of instruction by the candidate and that student knowledge is at a level of understanding beyond memorization. Candidates provide evidence for the diversity of students they teach.	x	x	x	x			x	x			
Standard 6: Professional Knowledge and Skills Effective teachers of science strive continuously to improve their knowledge and understanding of the ever changing knowledge base of both content, and science 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		x	x		x	x	x	x			

SPA Standard # and Description National Council of Teachers of Mathematics	Course Alignment											
	SMED 501	SMED 510	SMED 520	SMED 530	SMED 560	SMED 620/630	SMED 590	SMED 589				
Standard 1: Content Knowledge Effective teachers of middle grades mathematics demonstrate and apply knowledge of major mathematics concepts, algorithms, procedures, connections, and applications within and among mathematical content domains.	x						x	x				
Standard 2: Mathematical Practices Effective teachers of middle grades mathematics solve problems, represent mathematical ideas, reason, prove, use mathematical models, attend to precision, identify elements of structure, generalize, engage in mathematical communication, and make connections as essential mathematical practices. They understand that these practices intersect with mathematical content and that understanding relies on the ability to demonstrate these practices within and among mathematical domains and in their teaching.	x						x	x				
Standard 3: Content Pedagogy Effective teachers of middle grades mathematics apply knowledge of curriculum standards for mathematics and their relationship to student learning within and across mathematical domains. They incorporate research-based mathematical experiences and include multiple instructional strategies and mathematics-specific technological tools in their teaching to develop all students’ mathematical understanding and proficiency. They provide students with opportunities to do mathematics – talking about it and connecting it to both theoretical and real-world contexts. They plan, select, implement, interpret, and use formative and summative assessments for monitoring student learning, measuring student mathematical understanding, and informing practice.	x		x	x			x	x				
Standard 4: Mathematical Learning Environment Effective teachers of middle grades mathematics exhibit knowledge of pre-adolescent and adolescent learning, development, and behavior. They use this knowledge to plan and create sequential learning opportunities grounded in mathematics education research where students are actively engaged in the mathematics they are learning and building from prior knowledge and skills. They demonstrate a positive disposition toward mathematical practices and learning, include culturally relevant perspectives in teaching, and demonstrate equitable and ethical treatment of and high expectations for all students. They use instructional tools such as manipulatives, digital tools, and virtual resources to enhance learning while recognizing the possible limitations of such tools.	x				x		x	x				
Standard 5: Impact on Student Learning Effective teachers of middle grades mathematics provide evidence demonstrating that as a result of their instruction, middle grades students’ conceptual understanding, procedural fluency, strategic competence, adaptive reasoning, and application of major mathematics concepts in varied contexts have increased. These teachers support the continual development of a positive disposition toward	x	x	x	x	x		x	x				

<p>mathematics. They show that new student mathematical knowledge has been created as a consequence of their ability to engage students in mathematical experiences that are developmentally appropriate, require active engagement, and include mathematics-specific technology in building new knowledge.</p>											
<p>Standard 6: Professional Knowledge and Skills Effective teachers of middle grades mathematics are lifelong learners and recognize that learning is often collaborative. They participate in professional development experiences specific to mathematics and mathematics education, draw upon mathematics education research to inform practice, continuously reflect on their practice, and utilize resources from professional mathematics organizations.</p>		<p>x</p>	<p>x</p>		<p>x</p>	<p>x</p>	<p>x</p>				

3. CURRICULUM CONTRACT:



CURRICULUM CONTRACT

GSKYTEACH

Master of Arts in Teaching, Initial Certification Grades 8-12

Note: Candidates seeking a mathematics, chemistry, or physics initial certification must complete or have completed a teacher certifiable major in order to be recommended for the certification. Successful completion of this program qualifies the candidate for a statement of eligibility for teaching in secondary mathematics, physics or chemistry in the Commonwealth of Kentucky.

Admission Requirements:

To be admitted into a teacher preparation program, candidates must meet all minimal criteria described on the next page under “Transition Point 1: Admission to Education Preparation Programs.”

Professional Education Courses—30 hours

- ___ SMED 501 – 3 hrs
- ___ SMED 510 – 3 hrs
- ___ SMED 520 – 3 hrs
- ___ SMED 590 – 8 hrs
- ___ SMED 589 – 3 hrs
- ___ SMED 530 – 3 hrs
- ___ SMED 560 – 3 hrs
- ___ SMED 620 – 3 hrs
- ___ SMED 630 – 1 hr

Teacher Certifiable Major

Candidate must complete or have completed a teacher certifiable major in chemistry, physics or mathematics at the undergraduate level in order to be eligible for teacher certification.

Delineation of Unit/Program Transition Points – Initial Preparation

Transition Point 1: Admission to MAT Middle Grades Education for Initial Certification Preparation Programs			
Data Reviewed	Minimal Criteria for Admission/Continuation	Review Cycle	Reviewed By
<u>Unit Level Data:</u>		Each Month	Professional Education Council
<ul style="list-style-type: none"> Admission Application 	<ul style="list-style-type: none"> Completion of application 		
<ul style="list-style-type: none"> Documentation of completion of baccalaureate degree with a major, or equivalent, in an approved certification area and from an accredited institution 	<ul style="list-style-type: none"> Documentation of completion of baccalaureate degree with a major, or equivalent, in an approved certification area and from an accredited institution 		
<ul style="list-style-type: none"> Recommendation for admission following a transcript review by an MAT advisor associated with the certification area sought (deficiencies may require applicant to take additional undergraduate courses) 	<ul style="list-style-type: none"> MAT advisor approval 		
<ul style="list-style-type: none"> Letter of application including professional goals 	<ul style="list-style-type: none"> Completion and submission of letter including professional goals 		
<ul style="list-style-type: none"> Cumulative grade point average of 2.75 or above (counting all course work, undergraduate and graduate) OR a GPA of 3.0 in the last 30 hours of coursework (counting all course work, undergraduate and graduate). 	<ul style="list-style-type: none"> 2.75+ average 		
<ul style="list-style-type: none"> Test Scores – State minimum passing scores for GRE or PPST for admission to the professional education unit 	<ul style="list-style-type: none"> State minimum required for GRE or PPST qualifying scores for admission to the professional education unit. 		
<ul style="list-style-type: none"> Test Scores – Passing Scores on the appropriate PRAXIS II test in major area. 	<ul style="list-style-type: none"> State minimum required for Praxis II passing scores for certification area 		
<ul style="list-style-type: none"> Documentation for partial admission to teacher education prior to acceptance to graduate studies: 3 references, physical (including TB test), successful KY criminal background check, and a signed code of ethics 	<ul style="list-style-type: none"> State requirements for clearance for teacher certification 		
Transition Point 2: Admission to Final Experience (e.g., Internship, Student Teaching, Clinical Practice, Culminating Assessment)			
Data Reviewed	Minimal Criteria for Continuation	Review Cycle	Reviewed By
<u>Unit Level Data:</u>		Each Semester	Professional Education Council
<ul style="list-style-type: none"> Admission to Education Preparation 	<ul style="list-style-type: none"> Admission approved by Professional Education Council 		
<ul style="list-style-type: none"> GPA's 	<ul style="list-style-type: none"> 3.0 overall as per Graduate Studies Policy for all graduate programs 		
<ul style="list-style-type: none"> Completion of required field hours 	<ul style="list-style-type: none"> At least 200 hours documented based on requirements of 16 KAR 5:040 		
<ul style="list-style-type: none"> Semester Hours Completed 	<ul style="list-style-type: none"> 30 hours 		
<ul style="list-style-type: none"> Dispositions Scores 	<ul style="list-style-type: none"> All dispositions average "At Standard" (3+) 		

<ul style="list-style-type: none"> Key Assessment Scores 	<ul style="list-style-type: none"> 2.0+ overall 2.0+ per Kentucky Teacher Standard measured 		
Transition Point 3: Program Exit			
Data Reviewed	Minimal Criteria for Exit	Review Cycle	Reviewed By
<u>Unit Level Data:</u>			
Advanced Internship Grade	C or higher - based on Teacher Work Sample holistic score of 2+ and 2.0+ Kentucky Teacher Standard Measured	Each Semester	Office of Teacher Services

To be recommended for initial certification, an applicant must document:

- Completion of an approved teacher preparation program in each desired certification area;
- Passing Scores on the appropriate PRAXIS II exams (e.g., Content, PLT) or other assessments required for each desired certification area;
- Achievement of at least a 3.0 GPA overall in each major and minor, and in professional education courses;
- Attainment of at least a “C” in all professional education courses, including EDU 589 and student teaching.

Candidate’s Name (printed)

Education Advisor’s Signature/Date

Candidate’s Signature/Date

Specialization Advisor’s Signature/Date