

Helios STEM Middle School Residency Program

NEWSLETTER

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ANNOUNCEMENT

The Helios STEM Middle School Residency Program was recently *awarded USF's 2019-2020 Student Success Award in Academic Excellence Award*. Just another testament to the high-quality nature of this innovative program. Congratulations to all who help make this program so special!









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COPLANNING AND COTEACHING MIDDLE LEVEL CORE COURSES

Affectionately referred to as “The Middle Level Core,” our core program courses provide a laser-like focus on young adolescents’ developmental characteristics and needs, middle level mathematics teaching methods, middle level classroom management, STEM education, and clinical practice. Core program courses include a Middle Level Education (EDM 3620), Middle School Mathematics Methods I and II (MAE 3224 & MAE 3225), Classroom Management for a Diverse School and Society (ESE 4322), Teaching the Young Adolescent Learner (EDM 3620), Contemporary Issues in STEM (EDM 4406), Practicum I and II (MAE 3941 & MAE 3942), Residency I & II (MAE 4941 & MAE 4942).

In Fall 2020 three of these courses—EDM 3620 Middle Level Education, MAE 3224 Middle School Mathematics Methods I, and MAE 3941 Practicum I—were coplanned and cotaught for the first time (previously, only MAE 3941 and EDM 3403 were coplanned and cotaught as one in one large block of time on Fridays). This experience helped set the foundation for teacher candidates’ understanding of teaching mathematics to young adolescents in a middle school setting.

In Spring 2020, three more core program courses—ESE 4322 Classroom Management, MAE 3942 Middle School Math Methods II, and MAE 3942 Practicum II—were coplanned and cotaught as one in one large block of time on Fridays. In the middle school classroom setting, classroom management and mathematical instruction are inseparable. Teachers must consider the management issues and content issues concurrently when planning and implementing instruction. Cohort 7 students experienced the benefits of combining content knowledge with pedagogical content knowledge.

RESEARCH RELATED TO THE HELIOS STEM MIDDLE SCHOOL RESIDENCY PROGRAM

Through their work in the Helios STEM Middle School Teacher Residency Program, Drs. Ellerbrock and Vomvoridi-Ivanovic are developing a framework on teaching middle level mathematics to young adolescent learners called Responsive Middle Level Mathematics Teaching (RMLMT). RMLMT defined as “quality mathematics teaching for all young adolescents that advances their mathematical thinking, promotes equity and social justice, and attends to their developmental characteristics, needs, and interests” (Ellerbrock & Vomvoridi-Ivanovic, 2019) reflects a more integrated and holistic approach to middle level mathematics teaching than existing frameworks.

In January of 2018, Drs. Ellerbrock and Vomvoridi-Ivanovic launched a longitudinal qualitative research study to further understand the ways novice middle grades mathematics teachers, who are either enrolled in or have recently graduated from USF’s Helios STEM Middle School Teacher Residency Program, conceptualize and enact RMLMT. Findings from this investigation will be submitted to scholarly journals for publication this academic year.

Drs. Ellerbrock and Vomvoridi-Ivanovic are also finishing up a self-study project that investigated their experience coplanning and coteaching teacher preparation courses in the clinical setting. Multiple manuscripts on this project are being finalized and submitted in the upcoming months.

