College Credit Plus – Preparation of Mathematics Instructors

Ohio State's Department of Mathematics has developed a program of 18 graduate credit hours in mathematics to prepare high school teachers of College Credit Plus (CCP) courses. The program has potential to build a much-needed cadre of high school teachers working near and above the boundary of college-level mathematics, augmenting Ohio State's outreach offerings to the state and to the mathematical sciences.

Desired Instructor Background: Candidates should be certified high school teachers who have at least three (3) years of experience teaching high school mathematics and the desire to teach courses for college credit. They should have an undergraduate mathematics degree and, ideally, a B average or better in their mathematics courses.

Courses and Schedule: This program will consist of six 3-credit-hour graduate mathematics and statistics courses offered over fifteen months (first cohort schedule given):

| Summer 2019* | Math 5194 – Comparative Analysis Math 5194 – Symmetries | Instructor: Dr. Brad Findell Schedule: June 10-28 8:30 a.m. to 12 p.m. MTWR Instructor: Dr. Herb Clemens Schedule: July 8- 25 8:30 a.m. to 12 p.m. MTWR | Drawing on the rich history of the calculus, this course will compare various approaches to analysis. The goal of the course is to deepen both rigor and intuition underlying key concepts of the calculus, highlighting critical conceptual and philosophical obstacles and their resolution. This course will give a brief and elementary introduction to the topic of finite groups of symmetries. We will see the importance of use of the complex number system in understanding groups of symmetry. |
|---------------|---|--|--|
| Autumn 2019** | Math 5101 | Linear Mathematics in Finite Dimensions | |
| Spring 2020** | Math 5152 | Introduction to Number Theory with Applications | |
| Summer 2020** | Math 5194 – Survey Real Analysis Stat 5194 | (TBD) | |

^{*}The courses to be offered in Summer 2019 serve as bridge courses to regular graduate mathematics offerings

For questions, contact Dr. Brad Findell (<u>findell.2@osu.edu</u>), Associate Director, Mathematics Programs for Teachers.

^{**}Math 5101 and Math 5152 are part of the MMS-Education degree. No Math 5194 or Stats 5194 course has been approved to satisfy particular math graduate degree requirements.