Welcome

Thank you for accepting our invitation to be interviewed. We hope this booklet provides all necessary information needed to enable a pleasant and productive interview. For your convenience, this document is also available online at http://faculty.ccp.edu/dept/math/hiring/. Please feel free to contact us if you have questions. Our contact information can be found on the last page of this document. We look forward to meeting you.

Contents

Before the Interview ............................................................................................................................................................... 2
Getting to the Interview.......................................................................................................................................................... 2
Community College of Philadelphia Main Campus Map ........................................................................................................ 3
Developmental Mathematics at CCP ...................................................................................................................................... 4
Full-time Developmental Mathematics Faculty ...................................................................................................................... 4
Interview Preliminaries ........................................................................................................................................................... 5
Interview Outline .................................................................................................................................................................... 5
Interview Questions ................................................................................................................................................................ 6
Demonstration Topics ............................................................................................................................................................. 7
Frequently Asked Questions ................................................................................................................................................... 8
Contact Information ................................................................................................................................................................ 8
Before the Interview

You should have received by email and postal mail this document, a letter detailing your scheduled interview time and date, and a brochure from the College discussing employment at the Community College of Philadelphia. If you are missing any of these documents, please contact the person handling interview scheduling below. Please also contact this person if a pressing need to make changes to your interview arises. Division of Math, Science & Health Careers Office Supervisor Yvonne Foster is responsible for scheduling issues and can be reached at 215-751-8438 or at yfoster@ccp.edu.

Getting to the Interview

Each candidate is responsible for making his or her own arrangements to get to the interview. The interview will be held in the West Building on the College’s Main Campus located at 1700 Spring Garden Street, Philadelphia PA 19130, found at the intersections of 17th and Spring Garden Streets, which is about six blocks north of the very center of the city. The campus is within walking distance of public transportation routes including the Broad Street Subway (Broad and Spring Garden Streets), several bus routes including Routes 2 and 43 (17th and Spring Garden Streets) and Penn Center Suburban Station (16th St. and JFK Blvd.) More information can be found at the SEPTA\(^1\) website, http://www.septa.org. A map of center city transit can be found at http://www.septa.org/maps/region/pdf/ccp.pdf.

There is metered parking on the nearby streets which may be quite available on a Saturday. Or you may park in the College public parking garage which has entrances on 17th and 18th streets (see map). However there is only one pay exit on 18th street. If you do park in this garage, please let the Committee know so that a voucher can be issued before you leave. The voucher will permit you to pay the daily student parking rate of $5.00. Please be advised that the parking garage closes at 3:00 PM on Saturdays.

The West Building stands on the southwest corner of that intersection, which would be on your right if you faced the tall buildings at the center of the city. The entrance to the West Building is on 17th Street underneath the overhead walkway. The interview will be held in room W2-08.

There is major construction being done to portions of the West Building and the grounds between it and the Gymnasium but this should not interfere with getting to the interview room. If you are having difficulty locating the room, please ask one of the security officers at the security desk found at the front entrance of every building on the campus.

For only those candidates who will be traveling a significant distance:

Some funds may be available to offset travel expenses. Receipts are necessary and questions concerning reimbursement requisites and procedures can be directed to Technical Specialist Margaret Starr in the Division of Math, Science & Health Careers. She can be reached at 215-751-8431 or mstarr@ccp.edu.

Candidates interested in scheduling an interview with the College administration during the same trip will need to contact the interview scheduler (see above). Interviews with the administration, when possible, will most likely need to be during a weekday. The Developmental Mathematics Hiring Committee is not involved in this interview and is not responsible for any facets of its availability, arrangement, execution or alteration.

\(^1\) SEPTA is the Southeastern Pennsylvania Transportation Authority, provider of public transportation in the city and environs.
Community College of Philadelphia Main Campus Map

A - Annex  
B - Bonnell Building  
C - Center for Business and Industry  
D - Child Care Center  
G - Gymnasium  
M - Mint Building  
S - Winnet Student Life Building  
W - West Building  
P1 - Public Parking Garage  
P2 - Employee Parking Lot

* - Entrance to West Building  
* - Interview Room W2-08

Enter West Building (⋆ on map). Take escalator to 2nd floor - turn right to hallway toward Spring Garden St - turn right to W2-08 (⋆ on map) on right.
Developmental Mathematics at CCP

CCP’s Mathematics Department currently offers three courses that are considered developmental. These are Arithmetic, Elementary Algebra and Intermediate Algebra. Arithmetic is the lowest level mathematics course offered through the College. When admitted to the College, students, according to assessment scores, may either be placed into one of these courses, making them a developmental mathematics student, or into a higher level mathematics course. The descriptions of each of these courses as they appear in the most recent version of the College Catalog are:

MATH 016 Arithmetic
Integers, fractions, decimals, scientific notation, ratio and proportion, percents, geometry and measurement, applications, approximations, use of a scientific calculator. Credit will not apply toward graduation.

MATH 017 Elementary Algebra
Integer and rational arithmetic, algebraic expressions, linear equations and inequalities in one variable, rectangular coordinates, linear equations in two variables and their graphs, polynomials, factoring, quadratic equations. Credit will not apply toward graduation. Prerequisite: MATH 016.

MATH 118 Intermediate Algebra
Real numbers, polynomials, rational expressions, algebraic expressions, linear equations and inequalities in one variable, absolute value equations and inequalities, linear equations in two variables, graphs of lines, systems of linear equations in two variables, quadratic equations in one variable, problem solving. Prerequisite: MATH 017.

The contractual class-size maxima for these courses are 20 students per section for Maths 016 and 017, and 36 students per section for Math 118.

Most higher level mathematics courses at CCP require Math 118 Intermediate Algebra (or higher) as a prerequisite and most College programs require graduating students to successfully complete at least one mathematics course of Math 118 level or higher. Owing to this, for those that do not place into higher courses, completing the Math 016-Math 017-Math 118 sequence has been identified as a critical component of academic success at CCP.

The Mathematics Department currently consists of more than 100 faculty, at least 30 of whom are full time. Approximately 10,000 students enroll in developmental mathematics courses across roughly 400 sections per year at CCP. Developmental mathematics courses account for 75-80% of all mathematics course sections in any given semester. Consequently, developmental mathematics plays a crucial role in the activity of the department and the College.

Full-time Developmental Mathematics Faculty

Finalists who are hired as developmental mathematics faculty will be full members of the Mathematics Department, enjoying full voting privileges on all matters before the department as well as reporting to and receiving course assignments from the head of the Mathematics Department. The base course load for full-time faculty is four sections in each of the fall and spring semesters.

According to current departmental policy, only developmental mathematics faculty with a Masters (or higher) in Mathematics are eligible to be assigned mathematics courses outside the developmental program. Regardless of education, developmental mathematics faculty are expected to have course loads predominantly in the developmental courses and help lead the department’s efforts in making the developmental mathematics program more successful.

2 Source: http://www.ccp.edu/site/academic/courses/math_crs.php. Descriptions of all math courses are available here.
Interview Preliminaries

Candidates should familiarize themselves with the College’s mission statement. The complete text can be found at http://www.ccp.edu/site/about/mission.php. An excerpt is provided here:

Community College of Philadelphia is an open-admission, associate-degree-granting institution which provides access to higher education for all who may benefit. Its programs of study in the liberal arts and sciences, career technologies, and basic academic skills provide a coherent foundation for college transfer, employment, and life-long learning. The College serves Philadelphia by preparing its students to be informed and concerned citizens, active participants in the cultural life of the city, and enabled to meet the changing needs of business, industry and the professions. To help address broad economic, cultural and political concerns in the city and beyond, the College draws together students from a wide range of ages and backgrounds and seeks to provide the programs and support they need to achieve their goals.

More details about the College can be found at http://www.ccp.edu/site/about/.

The interview room will be a typical classroom with a chalkboard and pull-down projection screen. If you intend to use any audio-visual devices such as overhead projectors, computer projectors and the like, please check with the interview scheduler so these devices can be made available if possible. If you intend to circulate handouts, please make sure that you print and bring enough for everyone (there will be at most seven faculty interviewing you). If you have sample syllabi or lesson plans that you would like the Committee to see, please provide copies for everyone.

You will be asked to sign a printed copy of your application at the time of the interview. Again, if you have any questions about the interview, our contact information is on the back page of this booklet.

Interview Outline

The interview is scheduled to last 75 minutes. It will be broken up into three parts:

Part 1 — Interview Questions (30 minutes)

The Committee will ask a series of six questions (see next page) and the candidate will have 30 minutes total to answer them. This means that you have roughly 5 minutes to answer each one. If less time is spent on one, the remaining time can be used on another. There may be follow-up questions based on your responses.

Someone on the Committee will be keeping time and will mention when time is running low. You may sit behind or in front of the instructor’s desk or stand, whichever you prefer, for this part of the interview. A copy of the six questions will be provided in the case you did not bring them.

Part 2 — Demonstrations (30 minutes)

The candidate will be expected to prepare and present two 15-minute demonstrations (see p. 7). The first demonstration topic is fixed, but the second one is to be randomly selected at the time of the interview from a list of six topics. The candidate may not choose the second topic and is encouraged to prepare for all seven topics.

During the demonstrations, members of the Committee may ask questions as if they were students where some may be less proficient in the subject, others more. The Committee may ask the candidate to skip forward or back in the presentation (perhaps in the interest of time to get to an important point) or to elaborate more on a particular point, stepping out of the role-playing scenario for a moment. It may be the case that the candidate does not get to complete the prepared demonstration before the 15 minutes are up. This is okay and will not reflect negatively on the candidate.

Part 3 — Candidate Questions (15 minutes)

The candidate is permitted 15 minutes to ask questions of the Committee. (See p. 8).
Interview Questions

There are six main interview questions. The Committee will ask each of these in the order they appear below. Subsequent follow-up questions may be asked. Since there are 30 minutes allotted to the question portion of the interview, you will have 5 minutes each on average to answer each of these.

1. Share with us your experiences in developmental mathematics.

2. Community College of Philadelphia’s mission states that it seeks to provide the support needed for students to achieve their goals. CCP’s developmental mathematics student population is very diverse in many ways, including socio-economic and educational backgrounds as well as scholastic preparedness. Describe the pedagogies you would recommend for a developmental mathematics program, especially one that serves such a diverse audience. What steps can be taken to implement such a program?

3. How do you define a successful developmental mathematics program? How would one measure whether its approaches are successful, and how would it be designed to monitor and adjust itself if it does not meet expectations?

4. Describe the role that alternate course delivery methods, collaborative learning, uniform examinations and technology should play in a successful developmental mathematics program.

5. Share any practices or concepts that you feel are best for developmental mathematics instructors. What is your vision of an ideal developmental mathematics educator community for sharing and developing new and better approaches to this subject?

6. What resources or research can you recommend the College draw upon or explore in order to enhance a successful developmental mathematics program?
Demonstration Topics

There are to be two demonstrations, each intended to take 15 minutes. Please prepare a lesson on each topic. Although the topic in question might require more than 15 minutes to present in a real class, you will be asked to present what you can. The Committee may ask you to move forward or skip material as time permits.

For some topics, some prior material and concepts you may assume your audience understands may be indicated. The first topic is fixed, but the second topic will be randomly selected from the list of six topics below. A few of the second topics are slightly outside the realm of developmental mathematics — this is intentional. You should present the lesson as if the Committee were a group of students in a class. They may ask questions as if they were students.

First Demonstration

Addition and Subtraction of Rational Numbers

This should include both when the denominators are like and unlike. You May Assume students know how to reduce fractions, find least common multiples, do integer arithmetic and multiply fractions.

Second Demonstration

The second demonstration topic will be randomly selected from the following six topics:

1. Exponential Notation with Integer Exponents

This should include cases where the exponent is zero and negative.

2. Solving Linear Word Problems

These should focus on word problems that lead to linear equations in one variable or to a system of two linear equations in two variables. You may assume students know how to solve linear equations and basic systems.

3. Factoring Quadratic Polynomials

This should include cases where the lead coefficient is 1 and not 1, as well as 1 and 2 variables. You may assume students are familiar with factoring out greatest common factors and factoring by grouping.

4. Solving Rational Inequalities in One Variable

This should be limited to cases where polynomials have rational roots. You may assume students know how to factor polynomials.

5. Compositions of Functions

This should be limited to algebraic functions. You may assume students are familiar with function notation, know how to determine the value and domain of a function and know how to simplify algebraic expressions.

6. Transformations of Graphs

This should include comparisons of the curves represented by the equations $y = f(x)$ and $y = af(bx + c) + d$ (rotations may be omitted). You may assume students are familiar with function notation, the Cartesian coordinate system and graphing.
Frequently Asked Questions

Q. What happens next in the hiring process? How long will it take before I’m notified of a decision?

A. Once all interviews are completed, the Committee will deliberate and make recommendations to the department head for review. He in turn sends recommendations to the Dean of Math, Science & Health Careers. The College administration makes decisions concerning follow-up interviews and whether to extend an offer. Despite efforts to make this happen in a timely fashion, delays sometime occur. Once the Hiring Committee submits its recommendations, it is not involved in the remainder of the process and cannot give a clear prediction of the length of time until a final decision is made. We hope that it is timely.

Q. What salary range should one expect?

A. The College and the Faculty Federation in the last contract agreed upon a salary schedule for full time faculty salaries. Specific salaries and rank are calculated based on a number of factors including degrees attained, number of years of full-time teaching experience, years of employment as a Graduate Teaching Assistant and years of other full-time related work experience. All experience must be documented. The specific calculation is done for the finalist near the end of the hiring process; therefore we cannot give you a specific figure at this time. For the 2010-2011 academic year, the minimum for an Academic Year Instructor, with a Masters degree and no relevant experience is $44,800 and the minimum for an Assistant Professor with a Masters degree is $46,000.

Q. What benefits are offered?

A. The Faculty and Staff Federation of Community College of Philadelphia is the union representing all faculty and staff at the College. Benefits extended to full-time faculty are detailed in the latest contract between it and the College. We direct you to the Full-time Faculty contract on the Federation’s website: http://www.aft2026.org/FTFcontract_2006-11_withindex.pdf.

Contact Information

Interview Scheduler

Yvonne Foster, Office Supervisor, Division of Math, Science & Health Careers 215-751-8438 yfoster@ccp.edu

Mathematics Department Head

Dan Jacobson, Associate Professor – Mathematics 215-751-8430 djacobson@ccp.edu

Developmental Mathematics Hiring Committee

Brenton Webber, Assistant Professor – Mathematics (Chair) 215-751-8690 bwebber@ccp.edu
Jere Brubaker, Assistant Professor – Mathematics
D. Michael Byler, Assistant Professor – Chemistry (Ex-officio)
Lilla Hudoba, Assistant Professor – Learning Lab Math Specialist
Geoffrey Schulz, Associate Professor – Mathematics
Paula White, Director of Developmental Education

Thank You