

OVERVIEW

The University of Maryland, Baltimore County (UMBC) is recruiting Maryland secondary science teachers for its comprehensive 2010-2011 professional development program in chemistry. Funded by the Maryland Higher Education Commission (MHEC) for a fourth year, the Teacher Quality in Chemistry (TQC) Program at UMBC will help teachers become highly qualified in chemistry through face-to-face and online instruction with UMBC faculty. The purpose of the TQC Program at UMBC is to create a learning community of 20 TQC Teacher Scholars recommended by their science supervisors for a sustained professional development program in Chemistry. In addition to expanding and fortifying the learning base of the TQC Teacher Scholars in the core learning goals for chemistry, the program will benefit their current and future students.

The program is designed to enhance participant success in the classroom. An education coordinator, who is an experienced high school science teacher, will help participants develop specific applications for course concepts and procedures. Workshop experiences have been designed to be easily repeated by participants in their classrooms and/or to reinforce teacher knowledge of chemistry topics.

Participants will leave the program with new and complete lesson plans that integrate with Vernier probeware, which will be available to participants through a loaner library.

For additional program information or directions, visit the TQC Program at the UMBC website at:

<http://www.umbc.edu/TQC>

HOW TO APPLY

All public and private secondary school science teachers who teach in Maryland schools are eligible to apply. Applications will be reviewed beginning February 1, 2010 and accepted until the program is filled. Apply early for best consideration, as enrollment is limited.

Applicants are required to submit original official college transcripts, information about their current teaching assignments, work histories and a personal statement highlighting how the course will enhance their science instruction. Each applicant must include a supporting paragraph from his/her school administrator and a signature of support from a science supervisor. Top applicants will advance to the second stage of the selection process, which involves brief interviews and surveys. Participants will be selected based on review of all information.

A condition of acceptance into the program requires that teacher scholars consider participating in an external evaluation with a separate consent process. In addition, an academic year classroom visit is required to examine the classroom use of the course

FACILITIES

The majority of 2010-2011 TQC Program activities including the Summer Practicum will be held in the UMBC Department of Chemistry and Biochemistry, 1000 Hilltop Circle, Baltimore, MD

FOUR-PHASE PROGRAM

1) TQC PREPARATION COURSE - features eight half-day Tuesday sessions of instruction in chemistry with supplemental online instruction and meetings announced by course instructors. These TQC sessions will be held from 5:00 to 8:00 p.m.:

March 23 (orientation), 2010
April 6, 13, 20, & 27, 2010, and
May 4, 11, & 18, 2010

Course instruction will incorporate inquiry-teaching methodologies.

2) 'HANDS-ON' SUMMER PRACTICUM - features comprehensive lectures and laboratory instruction during the activity-based, ten-day session held:

June 21 to July 2, 2010, weekends excluded

The schedule may be adjusted if LEAs extend the school year due to missed days.

Participants will have opportunities to apply the concepts of general chemistry to realistic laboratory questions with an emphasis on laboratory techniques, including:

- UV/visible spectroscopy
- Potentiometric titration
- High Performance Liquid Chromatography (HPLC)
- Thin Layer Chromatography (TLC)
- Infrared (IR) spectroscopy

Participants will also have the opportunity to work in teams to teach these new labs to high school students before returning to their home classrooms.

3) 2010 FALL REFLECTION SESSION – tentatively scheduled for October 12, 2010 from 5:00 to 8:00 p.m. The purpose of this evening is to reflect on the initial experiences bringing new content and/or lessons back to the home classroom and to work on course activities related to presentations at the spring seminar and poster session.

4) FOLLOW-UP ACTIVITIES

POSTER WORK SESSIONS – scheduled individually

CLASSROOM VISITS – scheduled individually

2011 SPRING GALA "SHARE OUR SUCCESS" – tentatively scheduled for Saturday, April 23 2011 This seminar and poster session will be jointly attended by both the TQB and TQC Teacher Scholars, who will showcase the knowledge learned and how it was incorporated into their classrooms.

BENEFITS

requirements will receive the full stipend, all books and materials, and a total of three graduate credits in Chemistry. Credits with the final grades will be posted by the end of the Spring 2011 semester.

STIPENDS

Teachers will receive attendance-based stipends of \$150 for full day and \$75 for half-day participation in the TQC Program at UMBC. The stipend is paid in three increments. Fifty-percent from each of the first two stipend installment payments will be withheld until all program requirements are completed as an incentive for completing the program.

TOTAL POSSIBLE TQC STIPEND:

Preparation Phase:

8 half-day sessions @ \$75 = \$ 600.00*

Summer Laboratory Course:

10 full-days @ \$ 150 = \$ 1,500.00*

One Follow-up Fall 2009 Session, Individual

Poster Work Session, Class observation &

Spring 2011 SOS Seminar = \$ 375.00**

TOTAL POSSIBLE TQC STIPEND = \$ 2,475.00

**50% will be withheld and paid only if TQC Program is completed*

***paid at the end of the program with all withheld percentages*

COURSE MATERIALS

Participants will receive course textbooks and notebooks/manuals to support instruction and laboratory notebooks with ideas for incorporating this chemistry instruction into their classrooms.

TUITION

Each TQC Teacher Scholar will enroll for one graduate credit in summer 2010 and two graduate credits in Fall 2010. The final grade for the Fall 2010 course will be assigned at the end of the Spring 2011 semester. The entire cost of instruction at UMBC associated with this enrollment will be paid by UMBC through grant support funded by the Maryland Higher Education Commission.

Campus housing will be provided at no cost to a limited number of participants who live over 40 miles from UMBC and/or demonstrate need for housing.

SPONSORSHIP

This program is supported by the College of Natural and Mathematical Sciences, Departments of Chemistry & Biochemistry and Education at UMBC and the Maryland Higher Education Commission through an Improving Teacher Quality State Grant: Partnership Grant for Professional Development. Development (FY 2010, ITQ Phase 8) Public Law 107-110 (No Child Left Behind Act of 2001)

For more information, contact the TQC Program Administrator: Mrs. Kathy Lee Sutphin at (410) 455-2271 or sutphin@umbc.edu

Teachers who currently do not meet the criteria for "highly qualified" as well as those who teach in high-need districts are strongly encouraged to apply.

APPLICATION TO THE 2010-2011 TQC PROGRAM AT UMBC

APPLICATIONS WILL BE ACCEPTED THROUGH FEBRUARY 1, 2010 OR UNTIL THE PROGRAM IS FILLED. Please print or type legibly. Be sure to complete both pages of the two-page application. Apply two easy ways: FAX your application to Kathy Lee Sutphin at (410) 455-5831 or fold, tape, and mail this application ensuring the postage paid address on the reverse side of this form is displayed. Tape the form and do NOT use staples. **VERY IMPORTANT:** Your application is NOT considered complete until we receive all official college transcripts and the endorsement from your LEA Supervisor.

- I have access to a computer and the Internet and am able to check my account daily for messages: YES NO
- I will be available to participate at the following activities:
- Preparation Course Sessions held Tuesday evenings, 5:00 to 8:00 p.m., from March 23, April 6, 13, 20, 27 & May 4, 11, & 18, 2010 YES NO
 - Summer Practicum Sessions June 21 to July 2, 2010, 9:00 a.m. to 4:00 p.m. weekends excluded YES NO
 - Possibly July 6, 7 and/or 8, ONLY if LEAs extend their school years due to missed days. YES NO
- I live more than 40 miles from UMBC and am interested in residing in a UMBC campus dormitory during the ten-day summer practicum. I understand that a limited number of rooms will be available to eligible participants. YES NO

I. GENERAL INFORMATION

Name _____

Position/Title _____

School Name _____ County Name _____

School is (check one): Public Private Parochial

School Address _____
Street City State Zip

Home Address _____
Street City State Zip

Email Address: _____ Alternate email address: _____

Home Phone: _____ Work Phone: _____ Cell Phone: _____

Contact me at: Home Work By phone By email Best time to reach me _____

II. SCHOOL INFORMATION

Is the school where you teach classified as High Need? YES NO Are you teaching out-of-field? YES NO

Are you a probationary teacher? YES NO Estimated total student enrollment: _____ Grades: _____ to _____

Please estimate the following for the 2009-2010 academic school year:

Total number of students you will instruct: _____ Classes and grades levels you will teach: _____

III. PERSONAL HISTORY

A. EDUCATION: Official college transcripts are required for the UMBC Graduate School from all attended institutions

List all institutions attended: _____

Highest degree earned: _____ Degree Granting Institution's names: _____

Degree Award Date: _____ Discipline: _____

B. EMPLOYMENT: Science Supervisor Name: _____ Title: _____

Science Supervisor Address: _____ Phone Number: _____

Current Employer (LEA): _____ Science Supervisor Email: _____

Other Supervisor: _____ Start Date for Current LEA: _____

C. EXPERIENCE: Years of teaching experience: _____ List areas of certification: _____

IV. SIGNATURE OF SUPPORT FROM LEA SUPERVISOR

All applications must include the signature of a central office supervisor of your LEA or current employing school system. An e-mail of support sent directly to sutphin@umbc.edu from a central office supervisor will be accepted in lieu of a signature on the application.

Supervisor Name (please print): _____ Title: _____

Signature: _____ Email Address: _____

UMBC –Teacher Quality in Chemistry Program
1000 Hilltop Circle - Dr. William LaCourse, PI
Baltimore, MD 21250

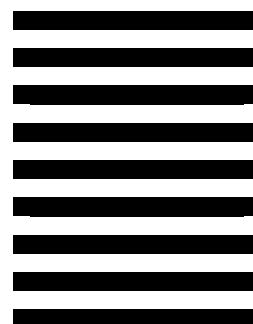
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UMBC – College of Natural and Mathematical Sciences
ATTN: Kathy Lee Sutphin, Assistant Dean for Instructional Projects
1000 Hilltop Circle, UC#116
Baltimore, MD 21250



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V. SUPPORTING PARAGRAPH FROM SCHOOL

A paragraph of support on your home school's letterhead is required from your school administrator or principal. Suggestions and comments about school needs for chemistry instruction are invited. The paragraph of support can either accompany this application or be sent separately on or before February 1, 2010, when the review of applications will begin.

VI. PARTICIPATION PLEDGE

My signature below acknowledges that if I am selected to participate in the 2010-2011 Teacher Quality in Chemistry (TQC) Program at UMBC, I understand that it consists of two courses (a total of 3 graduate credits) for which UMBC will pay for all tuition expenses related to the TQC Program through grant funding. I understand I will earn a letter grade in each course based on participation, effort and performance for each of the four phases of the program: 1) the TQC Preparation Course; 2) the ten-day summer practicum; 3) the 2010 Fall Reflection Session; and 4) Poster Work Session, Classroom Visit, and the 2011 Spring Gala "Share Our Success" poster and seminar session hosted by the College of Natural and Mathematical Sciences. I acknowledge and agree that 50% of stipend payments will be withheld and paid ONLY upon completion of the entire TQC Program and all course requirements as an incentive for program completion.

I also understand and agree to consider participating in a comprehensive formative and summative program evaluation conducted by an external evaluator, which will have a separate consent process.

As component of the two courses, I agree to participate in required course-related evaluation activities examining the classroom use of the course content and including an academic year classroom observation. In the course evaluation, I agree to provide the date(s), class(es), and applicable lesson plan(s) for lessons implementing the chemistry instruction and will include my contact information as well as estimates of the total number of students impacted, and identified by the following categories traditionally underrepresented in the sciences: gender; race; ethnicity; academic talent; primary language;

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socioeconomic status; academic talent; primary language; socioeconomic status; and handicapped status. This information is required for the final report to MHEC, the funding agency of the TQC Program at UMBC.

VI. TYPED PERSONAL STATEMENT– This statement is required before your application is considered complete.

In 300 words or less, please describe 1) how participation in UMBC's TQC Program will benefit your science instruction; 2) how you plan to use the chemistry knowledge and skills you will gain, and 3) how committed you are to completing the entire, four-phase program. Please type this personal statement on a separate sheet and include it with your two-page application.

By my signature below, I pledge that all information given in this application is true to the best of my knowledge.

Signature: _____

Date: _____

VII. SUPPLEMENTAL MATERIALS: Please mail all required supplemental materials (transcripts, letters of support, etc.) directly to:
UMBC College of Natural and Mathematical Sciences Attn: Kathy Lee Sutphin; 1000 Hilltop Circle, UC 116; Baltimore, MD 21250