

2008 Summer School in Junior Certificate Science by Guided Inquiry

The Physics Education Group within the Centre for the Advancement of Teaching and Learning (CASTeL) at Dublin City University will host the First Summer School in Junior Certificate Science by Guided Inquiry, an intensive three-week summer program in physics and physical sciences for in-service teachers. The Summer School is supported by a grant from the Research & Development Committee of the Department of Education and Science. The program is tuition-free and participants receive a stipend. Funding is available for accommodation near the DCU campus for out-of-area participants. Transportation, meals, and other incidentals are the responsibility of the participant.

The material for the course, *Physics by Inquiry* (John Wiley & Sons, Inc.), has been especially developed by the world-renowned Physics Education Group at the University of Washington, Seattle, to be used in classes for pre-service teachers. These books are designed to strengthen subject matter background, and emphasise the development of fundamental concepts from observations and reasoning skills. The hands-on, inquiry-oriented method of instruction used in the Summer School helps prepare teachers to teach science as a process of inquiry. The course is designed to meet the needs of teachers with varying levels of preparation in physics.

The Summer School is open to all full-time teachers who teach Junior Certificate Science. No background in physics is required. The subject matter for the 2008 Summer School is kinematics and electric circuits, but it is the methodology employed that takes centre stage. Having been taught these topics by a process of guided inquiry will facilitate the introduction of this methodology into the classroom.

The 2008 Summer School is scheduled for June 30–July 18. Classes meet from 9.30 a.m. to 4.00 p.m., Monday–Thursday, and additionally on Friday July 18 from 9.30 a.m. to 12.30 p.m. The Summer School is a full-time, three-week commitment.

Teachers from within a one hour radius of DCU are expected to participate in a tuition-free Continuation Class that will meet Thursday evenings during the academic year 2008–2009. This class is designed to help teachers apply in their classrooms what they have learned during the summer, and to provide a weekly meeting point for a community of like-minded teachers.

Application and deadlines:

All full-time teachers who teach Junior Certificate Science are welcome to apply. There are 16 places available on the 2008 Summer School. We are hoping to invite a group of teachers with a wide range of backgrounds. Generally, preference will be given to teachers who apply together with a colleague from the same school.

The application deadline for the 2008 Summer School was March 7, 2008. However, **a few places are still available.** An application form is attached. Successful applicants will be notified within three weeks of receipt of the application.

Cost/stipend:

The Summer School is tuition-free, and text books are provided; participants pay for other supplies. A stipend of €1,000 (subject to tax) is offered upon completion of the Summer School.

Funding is available for accommodation near the DCU campus for participants from outside the greater Dublin area. Transportation and meals are the responsibility of the participant.

Requirements:

The Summer School is open to full-time teachers of Junior Certificate Science. The Summer School is a full-time, three-week commitment. Classes meet from 9.30 a.m. to 4.00 p.m., Monday–Thursday. Attendance is required during class hours. Take-home assignments are an integral part of the course, and a final exam is given on Friday July 18 from 9.30 a.m. to 12.30 p.m. These components of the course provide an opportunity for the participants to synthesize and articulate their understanding of the concepts developed during the Summer School. During the exam participants will be able to refer to *Physics by Inquiry* and their notebook. Some of the responses may be used in a strictly non-attributable manner in publications or talks on science education, as illustrations of general issues or trends.

Continuation Course:

Teachers working or living within a one-hour radius from DCU are expected, when possible, to participate in a Continuation Class that will meet 6.00 p.m. to 8.00 p.m. on Thursdays during the academic year 2008–2009. The Continuation Class is designed to help teachers apply in their classrooms what they have learned during the summer. The Continuation Course is tuition-free and is accompanied by a stipend of €200 per semester.

For additional information contact:

Dr. Paul van Kampen
Physics Education Group
School of Physical Sciences
Dublin City University
Glasnevin
Dublin 9
Ireland

E-mail: Paul.van.Kampen@dcu.ie

2008 Summer School in Junior Certificate Science by Guided Inquiry
Application form

Personal Information

First name:	Last name:
Home address:	
School address:	
E-mail:	

Teaching Experience and Professional Development

Number of years of teaching experience, including this year:	
Current position:	
Junior Cert Science classes you currently teach (e.g., 2× 1 st Year Science):	
Science subjects taught at Leaving Certificate level:	
Your role in your school's Science department (other than teaching):	
How would you describe the amount of professional development you have received (e.g. in-services)?	<input type="checkbox"/> little or none <input type="checkbox"/> moderate <input type="checkbox"/> a lot
I agree that my work may be published in a strictly non-attributable manner	<input type="checkbox"/> yes <input type="checkbox"/> no

College or University Education (including e.g. H.Dip.)

Institution	Starting year	Ending year	Qualification	(major) Subject

Questionnaire:

Please answer the following questions on no more than **two** pages of A4 paper in total:

1. What are your professional development goals, and how do you expect the Summer School to help you meeting these goals?
2. Select a single lesson you have taught that you regard as particularly representative of the instructional strategies you use with your students. Describe this lesson, and the motivation behind it. If you intend to modify this lesson, explain how and why you intend to do this.