'Focusing the general: putting the heart in an introductory biomedical engineering module'

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Abstract How do you design an introductory module for an interdisciplinary degree, which must simultaneously introduce the varied topics covered by the 4-year programme and cover specific prerequisite material for later modules, yet be a coherent module with appropriate academic depth?

We tackled this dichotomy by focussing on one specific area of application: the heart. Thus we could introduce separate strands of biomedical engineering, then develop them in case studies related to the heart. This successfully provided a thread of continuity through the module, ensured students made 'connections across subjects and out into the world', addressed other dimensions of UCL's connected curriculum strategy and allowed us to teach quite deep concepts for a year 1 module, whilst avoiding a traditional "An Introduction to…" format.

The application to the heart was further emphasised in lectures by invited researchers and by developing practical classes which again taught generic skills while applying them to the heart. The multiple lecturers contributing to the course appreciated being given this framework, which helped to unite us as a team, yet provided enough flexibility to accommodate our individual topics and teaching styles.

The success of this approach is already showing, in the quality and thoughtfulness of the student's coursework, and their positive response to the module. Feedback from lecturers and students was sought and found to be positive. We will discuss the rationale behind our approach, lessons learnt and how these could be applied to other subject areas.