Medical Curriculum Design
The Experience of the University of Hong Kong

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The Task for Tomorrow’s Doctors

A. Science
- Aging of population
- Changing disease pattern
- Demand for evidence-based medicine
- Importance of prevention
- Information explosion
- Use of alternative medicine

B. Art
- Auditing/ accountability of doctors
- Patient-shared decision making
- Rising public expectation/ demand

C. Reality
- Resource limitations
The Goals of Curriculum

- To produce doctors for the community who are
  - competent in understanding and delivering effective, humane and ethical medical care;
  - committed to life-long learning; and
  - ready to proceed to postgraduate training.

- Identified needs not translated into course objectives? e.g. resource limitation

Themes of Curriculum

- Theme 1: Human Biology in Health and Disease
- Theme 2: Doctors and Patients
- Theme 3: Medicine and Society
- Theme 4: Professional Development
• Choice of educational strategies
  – problem-based approach to cultivate ability of self-directed learning
  – community-based approach

• Content of curriculum
  – strengthening the content of geriatric medicine
  – structured clinical interpersonal skills
  – emphasis on medical ethics and law
  – exposure to alternative medicine in the curriculum

Structure of Curriculum

• System-based modules for the first two years

• Discipline-based and multidisciplinary clerkships in the last three years
## Curriculum Structure

### Year 1

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<tr>
<th></th>
<th>Sep</th>
<th>End of Jan</th>
<th>Mid-Feb</th>
<th>May</th>
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<tr>
<td><strong>Introduction to Health &amp; Disease Block</strong></td>
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<td></td>
<td>Formative Exam</td>
<td>Cardiovascular System</td>
<td>Respiratory System</td>
<td>First Exam</td>
<td>SSM</td>
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### Year 2

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<td><strong>Gastrointestinal System</strong></td>
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<td><strong>Urogenital System</strong></td>
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<td><strong>Musculoskeletal System</strong></td>
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<td><strong>Central Nervous System</strong></td>
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<td><strong>Haematology/Immunology System</strong></td>
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<td><strong>Endocrine System</strong></td>
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<td><strong>Second Exam</strong></td>
<td><strong>SSM</strong></td>
<td><strong>Exam SSM</strong></td>
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### Year 3

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<tr>
<td><strong>Integrated Block</strong></td>
<td><em>Phase I Clerkship: Core Programme Exam SSM</em></td>
<td><strong>Third Exam</strong></td>
<td><strong>SSM</strong></td>
<td><em>Phase II Clerkship: Extended Programme</em></td>
<td><strong>Phase III Clerkship: Advanced Programme</strong></td>
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### Year 4

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<tr>
<td><strong>Phase II Clerkship: Extended Programme</strong></td>
<td><strong>Phase III Clerkship: Advanced Programme</strong></td>
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### Year 5

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<tr>
<td><strong>Phase III Clerkship: Advanced Programme (continued)</strong></td>
<td><strong>Revision</strong></td>
<td><strong>Final Exam</strong></td>
<td><strong>SSM</strong></td>
<td><strong>Pre-tripship Programme</strong></td>
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Student-centred & Problem-solving
PBL using paper cases in Years 1, 2 and 3
and PBL in the ward

Integrated
System-based modules, multidisciplinary clerkships
**Community-based**
Clinical visits, health care projects, primary care module

**Electives**
Special Study Modules in the summer of Years 1, 2, 3 and 5
Systematic
Use of logbook, structured teaching
and learning experience

Modes of Teaching/ Learning

• Whole class/ big group sessions
• Small group sessions
  – PBL tutorials
  – Clinical skills sessions, clinical interpersonal skills sessions
  – Laboratory practicals
  – Bedside teaching, OPD sessions
  – Visits & projects
  – Special Studies Modules
• Individualized learning
  – Case studies
  – CAL programmes
Assessment

Principles

• Integration of disciplines in the assessment
• Assessment on knowledge, skills and attitude
• Continuous as well as “end-of-block” assessment

Timing

• Continuous assessment throughout the curriculum
• Year-end assessment in Years 1, 2 and 3

Standard

• Criterion-referenced
• Distinguished students identified for the award of prizes and honours
Techniques

- Multiple choice questions
- Extended matching questions
- Short answer questions
- Minicases
- PBL tutorial performance assessment
- Objectives structured clinical examinations
- Traditional clinical examinations
- Clinical skills learning assessment (end-of-block in years 3 & 5)
- Bedside session assessment (logbook)
- Visits/ case report assessment

Educational Strategies

Student-centred  Teacher-centred

Problem-solving  Information gathering

Integrated  Discipline-based

Community-based  Hospital-based

Electives  Standard Programme

Systematic  Apprenticeship

SPICES Model, Harden et al, 1984
Support Infrastructure

- Construction of new facilities
- Cooperation with other hospitals and service units in the community
- Staff development

Management Structure of the Curriculum

**Undergraduate Education Committee**

- Medical Education Unit

- Clinical Skills Planning Group
- CIPS Planning Group
- Community-based Teaching Planning Group
- Medical Ethics and Law Planning Group
- SSM Planning Group
- Assessment Planning Group
- Evaluation & Monitoring Group
- PBL Planning Group

- Year Planning Groups
  - Year 1
  - Year 2
  - Year 3
  - Years 4 & 5
Channels to Communicate Details of the Curriculum

- Publication and circulation of detail course handbook
- Putting details of the curriculum on the web
- Regular reports at Faculty Board
- Staff forum
- Student forum

Evaluation and Monitoring

- **Purpose**
  - Quality Assurance

- **Objectives**
  - Continuous trouble-shooting & quality improvement
  - Effective delivery of teaching
• **Tools**
  
  – Electronic voting system (lectures)
  
  – Questionnaires
  
  – Staff-student consultative meetings
  
  – Evaluation forms in logbook

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**Curriculum design**

~ a dynamic process

“Plan, do, reflect and act again.”
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CIPS Planning Group
Community-based Teaching Planning Group
Medical Ethics and Law Planning Group
SSM Planning Group
Assessment Planning Group
Evaluation & Monitoring Group
PBL Planning Group
Year Planning Groups

Students & Teachers Feedback

Year 1
Year 2
Year 3
Years 4 & 5