

*Ministry of Health and Medical Education  
Deputy of Educational Affairs  
Secretariat of the Council for Undergraduate Medical Education  
JPRM 2008-2009 Final Report*

*The Core Curriculum of Internal Medicine  
Clerkship of Undergraduate Medical Education*

*Translator:  
Zahra Abbaspour-Tamijani M.D.*

**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**

**Preface**

**A word with the educational authorities, faculty members, and medical students**

The curriculum of the clerkship of internal medicine is prepared based on the consensus of the faculty members of universities of medical sciences and vast inquiry from experts of medical education in the universities of medical sciences and deputy of health affiliated to ministry of health and medical education.

Obviously curricular communication with the students, faculty members, educational authorities, and other members of the medical school and university and providing appropriate educational environment is of a considerable importance.

At the end, we bring to your notice that the secretariat of the council for undergraduate medical education welcomes all suggestions and viewpoints of the connoisseurs of universities of medical sciences regarding improvement of the curriculum of undergraduate medical education.

Thus, please kindly communicate your valuable opinions to us at the following address:

Tel: 88364228

Fax: 88363987

e-mail:

[scume@amoozesh.hbi.ir](mailto:scume@amoozesh.hbi.ir)

website:

<http://scume.behdasht.gov.ir>

mailing address: 8<sup>th</sup> floor, central headquarter of ministry of health and medical education, Simaye Iran St, East Eyvanak Blvd, Shahrake Qods, Tehran

Postal Code: 1467664961

**Secretariat of the council for undergraduate medical education**

**July 2009**

*This document was endorsed in the 3rd Meeting of the Council for Undergraduate Medical Education.*

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**

**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**

**1- Length of the course:** 90 days

**2- Effective teaching hours during the course:** 480 hrs

Timing of the lecture-based courses and clinical rotations is generally determined according to the educational program of the clerkship course . All medical students are required to attend in the hospital ward at least since 7:30 AM to 2:00 PM each day and 5 days per week.

**3- Program manager:** to be filled by the medical school.

**4- Faculty members:** to be filled by the medical school.

**5- The expected outcome of the program:**

**a- knowledge**

The student must have enough knowledge of epidemiology, etiology, pathogenesis, pathology, clinical manifestations, clinical history, influence of potential physical and psychological factors on the patient in the domain of common medical diseases.

**b- Skill**

1- At the end of the course, the student must be able to take clinical history and do accurate and thorough physical examination and prepare the problem list of appropriate differential diagnoses.

2- At the end of the course, the student must find the appropriate approach to the principal complaints and signs of medical diseases.

3- At the end of the course, the student must be able to perform the clinical diagnostic procedures at least on the model.

4- At the end of the course, the student must be able to interpret common laboratory and radiological tests in the domain of internal medicine.

5- At the end of the course, the student must be able to write progress note correctly.

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**

**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**

**c- Attitude**

In order to deliver the best medical care, the student must be able to communicate to the patient, his/her family and accompanying person(s), other physicians and health personnel in an appropriate, effective, and empathetic way.

The relationship between the student and the patient must be compassionate and empathetic to build trust. For this purpose:

- a- The student must spend time to listen to the patient and accompanying person(s) and through this besides establishing a humane relationship, record and analyze the clinical history and findings for diagnosis and treatment of the disease and inform the patient and accompanying person(s) about the patient's condition, possible risks of different techniques, and necessary preventive measures.
- b- The student must consider the influence of factors like age, sex, education, religious-cultural and socioeconomic background on establishing the relationship with the patient and accompanying person(s) and understand the patient's status with this regard.
- c- The student must know the importance of research in internal medicine and the process of planning for a research work, executive parts and method of analysis of the results, and, in turn, participate in the research in clinical and basic sciences.

**6- The criteria and methodology for determining the core content ;**

- a- prevalence of the disease
- b- to have a serious effect on the community health
- c- to be preventable and included in screening program
- d- to be included in the national programs of the ministry of health
- e- to be related to the role of graduates in the health system of the country in the future

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**

**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**

**7- The content to be taught to yield the stated outcomes:**

<b>number</b>	<b>content</b>
1.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with increased creatinine
2.	Ability to interpret acid-base disturbances in ABG
3.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with common electrolyte imbalances
4.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with proteinuria and hematuria
5.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with hypertension
6.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with dysuria
7.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with anemia and approach to it
8.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with thrombocytopenia
9.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with the bleeding signs and symptoms related to the coagulation system
10.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with increased and decreased leukocyte
11.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with lymphadenopathy
12.	Ability to take history and perform physical examination and to consider a diagnostic plan for the patient with splenomegaly and hepatomegaly and approach to them

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**

**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**

13.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with fever and FUO
14.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with thyroid enlargement
15.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with musculoskeletal pain
16.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with diabetes mellitus
17.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with low back pain
18.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with arthralgia
19.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with dyspnea
20.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with hemoptysis
21.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with pleuritis and pleural effusion
22.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with acute and chronic cough
23.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with deep vein thrombosis
24.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with GI bleeding
25.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with abdominal pain
26.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with dyspepsia
27.	Ability for history taking and physical examination and suggesting a diagnostic

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**

**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**

	plan for the patient with constipation
28.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with diarrhea
29.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with vomiting
30.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with icterus or abnormal liver function tests
31.	Ability for history taking and physical examination and suggesting a diagnostic plan for the patient with ascitis

**8- Skills and abilities that a student must obtain in the internal medical ward:**

1	Thorough history taking and accurate physical examination
2	Method of writing the clinical course and daily recording
3	ABG taking ( at least on the model)
4	Insertion of endotracheal tube( at least on the model)
5	Cardiovascular resuscitation( on the model)
6	Differentiation of normal EKG from abnormal one
7	Insertion of nasogastric tube and gastric lavage
8	Ability to prepare and exam urine sample under microscope
9	Ability for analysis of urine by means of urinary test tapes
10	Ability for doing and analyzing CBC
11	Ability to exam the stool for OB&OP
12	Ability to gram stain of sputum, urine, and ascitic, pleural, synovial , and cerebrospinal fluid
13	Ability to do lumbar puncture(at least on the model)

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**

**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**

14	Ability to do knee joint synovial fluid puncture (at least on the model )
15	Ability to do pleural fluid puncture( at least on the model)
16	Ability to do ascitic fluid puncture( at least on the model)
17	Ability to do ophthalmoscopy
18	Ability to interpret ECG
19	Ability to interpret CXR
20	Ability to interpret simple abdominal radiography

**9- Teaching and learning method:**

Medical schools are required to apply the most appropriate educational strategies and teaching and learning methods for each of the above-mentioned contents according to the subject and within the limits of available educational facilities. Some of these methods are noted below:

Role playing, role model, video presentation, small group discussion, bedside- teaching, procedural skill teaching, task- based teaching, case- based teaching, etc.

**9- Formative assessment of knowledge, skill, and attitude and feedback technique during the course (Timing and frequency of assessments must be stated.)**

- Formative and summative assessments must be done during and at the end of the course, respectively.

Assessment is required to target the knowledge, skill, and attitude. Assessment tools must be valid and reliable

For instance, some assessment tools are mentioned below:

1- Logbook, 2- DOPS, 3- Mini CEX, 4- OSCE, 5- CBD ( case based discussion), 6- descriptive written examination and MCQ, 7- oral examination,8- global rating form

**11- Curricular communication**

- The curriculum must be available to the learners, faculty members, and educational and executive authorities of medical school or university at the beginning of the course and reachable at the university website.

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**



**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**

**12- Curricular management**

- For implementation of the program, the necessary preparations including faculty member education must be considered.
- Continuous monitoring of the program by deputy of undergraduate medical education is necessary.
- Department chair must report the result of the program evaluation to the medical school in regular intervals
- Dean of the medical school is required to resolve the problems regarding implementation of the program with joint work of the authorities of the faculty.

**12- Principal examination resources :**

Principal examination resources are the same as the comprehensive ( pre- internship) examination, including:

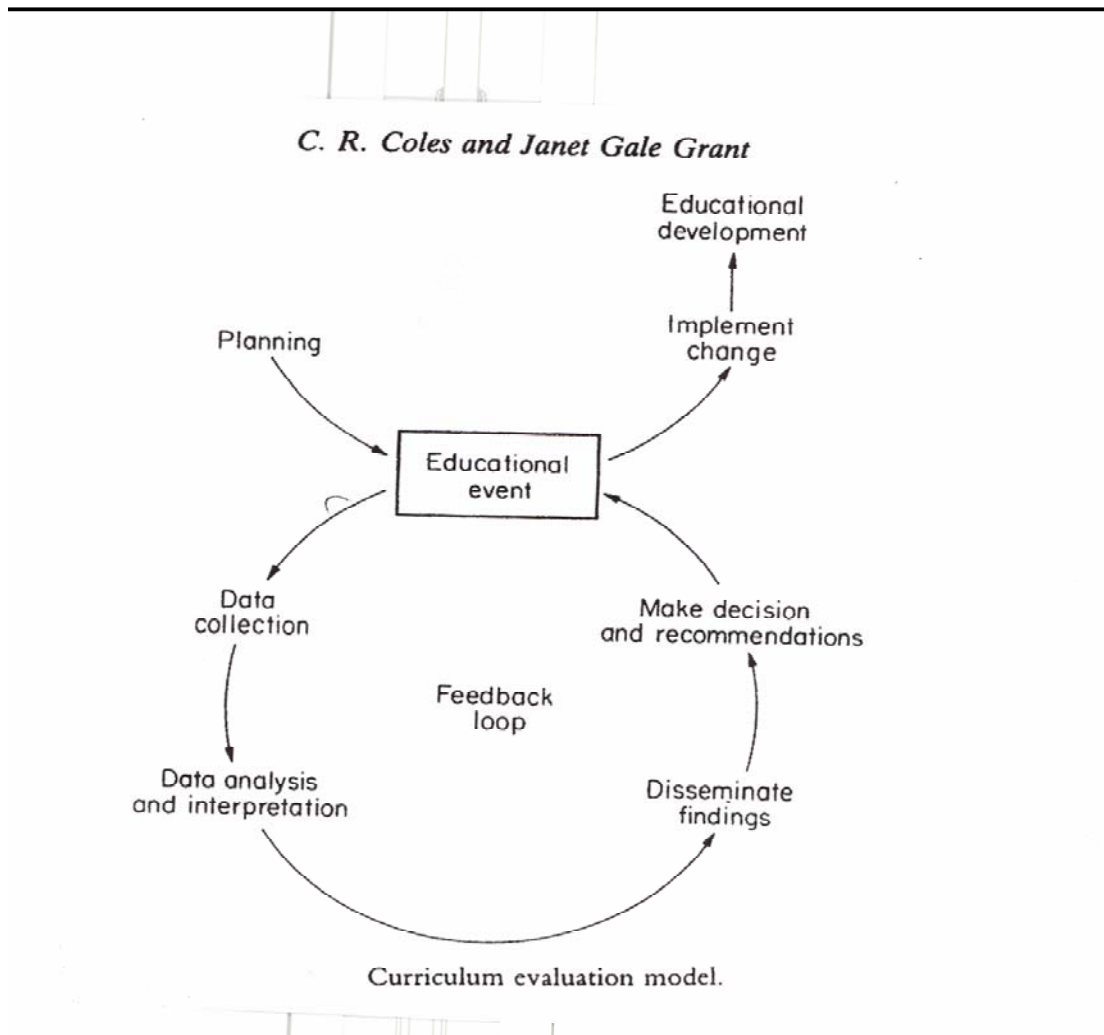
- 1- Kasper DL, et al. Cecil Essentials of Medicine/7<sup>th</sup> edition. W.B. Saunders; 2007
- 2- Braunwald Eugene, et al. Harrison's Principles of Internal Medicine. 16<sup>th</sup> edition. Mc Grawhill; 2005

**13- Curriculum evaluation**

- For each course, the curricular program must be evaluated by the educational department and under supervision of the medical school, according to the following model. The results must be considered for quality improvement of the educational program in the future courses:

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**

**Ministry of Health and Medical Education**  
**Deputy of Educational Affairs**  
**Secretariat of the Council for Undergraduate Medical Education**  
**JPRM 2008-2009 Final Report**



Educational department is required to submit the written report of the program evaluation to the medical school in regular intervals and also a copy of the report and actions taken to the members of the evaluation unit of secretariat of the council for undergraduate medical education in order to improve and ameliorate the program.

**Translator:**  
**Zahra Abbaspour-Tamijani M.D.**