Student Objectives for the Integrated Curriculum Evaluation Exercise

(1) Perform properly organized medical interviews and physical examinations, and conduct appropriate counseling for patients with a variety of problems
(2) Complete initial post-encounter "SOAP" notes and physical diagnosis skill stations
(3) Demonstrate professional interactions and communication with patients, faculty, and staff
(4) Conduct a concise and organized oral case presentation
(5) Explain differential diagnoses and diagnostic plans to faculty, demonstrating understanding of pathophysiologic principles that underlie the problems of patients seen

The ICEE is conducted in two Phases during the year and is a requirement for graduation.

Phase 1 (July)
Students who are expected to complete graduation requirements the following year are scheduled for the ICEE during Phase 1. The format of Phase 1 is a multi-patient clinical examination, rated by trained patients, encompassing objectives 1 through 4 listed above. Assessment of physical examination skills may require students to demonstrate physical examination technique and identify pathologic findings on mannequins and simulators as well as standardized patients. The ICEE Advisory Committee reviews the ratings of student performance and determines the final grades. Students are notified of Pass/Repeat decisions in late August after all Phase 1 examinations have been completed. Students who receive a passing grade on Phase 1 have fulfilled the ICEE requirement, and are awarded a grade of S (Satisfactory). Students whose performance is unsatisfactory in Phase 1 do not receive a failing grade; they must retake the ICEE in Phase 2. Standards for a passing performance are high. In recent years, approximately 20% of the class has been required to proceed to Phase 2. Students who do not appear for the exercise as scheduled in Phase 1, or arrive late, will have a grade of "F" reported to Enrollment Services and the Academic Progress Committee.

Phase 2 (beginning in October)
Students (a) whose performance is unsatisfactory in Phase 1, or (b) who do not participate in Phase 1 for any reason, must complete their ICEE requirement in Phase 2. The format of Phase 2 is a multi-patient clinical examination which is faculty-observed and faculty-rated, encompassing all five objectives above. On occasion, this exam may be conducted by faculty review of the student's videotaped and written performance rather than by live observation. A student whose performance is unsatisfactory on two Phase 2 attempts (whether or not the student participated in Phase 1), or by not appearing for the exercise as scheduled in Phase 2, or arriving late, will have a grade of "F" reported to the Enrollment Services and the Academic Progress Committee.

Confidentiality of Cases
The ICEE is considered a secure examination, and the material contained in all cases that students encounter is confidential. This means it is expected that students will not provide examination information to other students who have not yet taken the exam, and that students will not seek specific information from students who have taken the exam. This extends to discussion with students from previous or subsequent years who may be exposed to similar examination material. Exams may be videotaped for use by the Standardized Patient program for quality control purposes, or for student feedback.

ICEE Scheduling
Initial scheduling for the ICEE occurs as part of the Year 4 scheduling process. Students expected to complete graduation requirements the following year can select their Phase 1 ICEE date during Period 1. If a student is required to repeat the exercise, subsequent attempts will be scheduled at the discretion of the course director during Periods 4 and 5. Unexcused late arrival to, or absence from the exercise will result in a grade of "F". A student will be rescheduled for the ICEE without penalty only if the student is on Leave of Absence on the day of the exercise, or provides a letter documenting an excused absence for the day of the exercise from the Associate Dean for Student Affairs.

Appeal of Faculty Decisions
No appeal of a Phase 1 exam decision is allowed. Students who disagree with the decision of faculty rating their performance in Phase 2 may appeal the decision by sending a written notice of appeal to the Chair of the ICEE Advisory Committee (Anita C. Mercado, MD) within five working days of the exercise date, indicating the explicit reason for the appeal. The committee chairman will decide the most appropriate action to take in hearing the student's appeal, which may include, but is not limited to: acting on the appeal directly, review of the student's videotaped patient encounters, referring the appeal to the ICEE Advisory Committee, or requesting input from

Faculty members involved in the item under appeal. The course director or ICEE Advisory Committee shall render a decision regarding the student's challenge within five work days after completion of any meetings concerning the appeal.

Case Focus
Instructions for each patient encounter will focus the clinical tasks for the student. These tasks typically include, but are not limited to one or more of the following:

- Performing a medical interview
- Performing a physical examination
- Counseling or educating a patient about his/her problem and explaining the management plan
- Responding to a patient about concerns

Case Diversity
Students will typically be challenged by a variety of patients, which stress a wide range of patient ages, patient care settings, and problems. These typically include, but are not limited to one or more of the following:

Age	Setting	Problem
Pediatric	Physician's office	Acute
Adolescent	Community clinic	Chronic
Adult	Hospital	Well Care/Prevention
Geriatric	Emergency Department	Patient Behavior/Communication

ICEE Areas of Emphasis
The following table reflects the general mix of challenges in the ICEE, but does not represent an exact list of cases, nor does it imply that all cases will come from this list.

Acute and Chronic Medical Illnesses		Well-care & Preventive Medicine		Behavioral and Communication Challenges	
1	**Cardiovascular/pulmonary complaints** *Examples: chest pain, shortness of breath, cough, palpitations, claudication*	7	**Pediatric developmental health/common illness** *Examples: developmental milestones, fever, otitis, GI disturbance, dehydration, immunization schedule*		
2	**Gastroenterological complaints** *Examples: abdominal pain, vomiting, bowel function, nutrition, liver disease, surgical assessment*	8	**Health maintenance/risk assessment** *Examples: obesity, tobacco/alcohol, ASCVD, HIV, cancer, cultural/socioeconomic influences*		
3	**Genitourinary complaints** *Examples: dysuria, hematuria, frequency, discharge, erectile dysfunction, prostate disease*	9	**Adolescent health** *Examples: accidents, violence, substance use, sexual health, mental health*		
4	**Hematologic complaints and malignancy** *Examples: bleeding/bruising, anemia, lymphadenopathy, malignant diseases*	10	**Women's health/disease prevention** Examples: reproduction, menopause, breast disease, sexual dysfunction, STDs		
5	**Neurologic/musculoskeletal/diseases of aging** *Examples: seizure, stroke, headache, confusion, mobility, arthritis*	11	**Psychiatric disease/sexual & domestic violence** *Examples: mood disturbances, substance abuse, recognizing and counseling victims of violence*		
6	**Multi-organ system complaints/diseases** *Examples: syncope, weight Δ, swelling, falling, fatigue, diabetes*	12	**Breaking bad news/complex communications** *Examples: cancer, HIV, death of loved one, counseling for chronic or life-changing diseases*		
The ICEE may include family members as part of the encounters, and may utilize mannequins or computer simulations in addition to standardized patients					
Post-encounters stations may include patient notes and clinical skills tasks, including PE tasks (e.g., breast, musculoskeletal, heart, eye, ear, prostate, BP), interpretation tasks (e.g., blood, X ray, ECG, ABG), and patient management tasks (e.g., antibiotic choice, fluid replacement)					

Typical Format of the Integrated Curriculum Evaluation Exercise

Patient Encounter Stations (Phase 1 and Phase 2)

You will interview, examine, and/or counsel multiple patients (generally eight patients in Phase 1; four patients in Phase 2) during the exercise, which may be observed by faculty members on video monitors, or through an observation window. You must arrive to the test orientation room on-time and dressed appropriately for a patient encounter. Long or artificial nails are prohibited and strong fragrances are discouraged. You will not be allowed to use references or study aids of any kind during the exercise. You will be provided a clipboard, schedule, and blank notepaper. You will be provided basic patient information (e.g.; name, age, gender, chief complaint) prior to entering the examination room. You must bring a stethoscope for use in the exam. Other examination instruments, such as sphygmomanometer, reflex hammer, and oto-ophthalmoscope, along with other items that may be appropriate for each encounter, will be available in the examination rooms.

In each case you have 15 minutes, are functioning as a medical student, not a physician, and the patient will be visiting you for the first time. You will be serving as a primary care provider. From the moment you enter the room you are expected to behave as you would on a genuine patient encounter. You should direct your attention to the problem(s) for which the patient presents. Specific instructions will be available outside each examination room. The instructions will direct you to perform a medical interview, physical examination, patient counseling, or a combination of these activities. In all cases, you should explain your diagnostic impressions and management plan to the patient, as well as respond to patients' concerns or questions.

Upon entering the examination room, you should introduce yourself, explain your purpose for the visit, and begin your interview. You should wash your hands sometime before beginning a physical examination. Patients will be gowned appropriately. Your interviews should always explore the chief complaint by means of a thorough history of present illness. You must decide the detail in which other interview items (Past Medical History, Family History, Social History, and Review of Systems) should be pursued with each patient.

Examples
A detailed cardiovascular ROS is indicated for a patient with chest pain
A GI ROS is not necessary for a focused encounter of a patient with headache
Quantifying ethanol use is indicated in a patient with suspected liver disease
It is a mistake to omit a FH of ASCVD complications in a patient with ischemic chest pain

The most common avoidable errors in patient interviewing are failure to fully elicit details of the chief complaint.

In some of the cases you will need to perform a limited physical examination appropriate to the patient's problem(s). You should be as sensitive to eliciting pain on examination as you would be on a genuine patient encounter. You must decide how comprehensive your physical examination should be. **If a case's instructions specifically direct you to perform a female breast examination, you should do so**. Otherwise, you will not perform a breast, genital, rectal, or pelvic examination. If you believe one or more of these examinations are indicated, you should include these tests as part of your plan in your written note, if a note is included after the case.

Examples
A detailed cardiovascular exam is indicated for a patient with chest pain
A lung exam is not necessary for a focused encounter of a patient with headache
In a patient with chest pain, most of the time should be spent on a CV exam, not a detailed neurologic exam
It is a mistake to omit a lung exam in a patient with cough, or to examine lungs through the patient's gown

The most common avoidable errors on physical exam are (a) errors in draping that lead to inadequate or excessive patient exposure, or examining a body part through/over/under the gown; and (b) failure to use proper PE technique as demonstrated in the Bates textbook and video series.

In some cases, the major task may be to address a patient concern (e.g., "I am worried that I may have cancer"); or the major task may be to conduct patient education (e.g., "The patient requests information on how to decrease his risk of heart disease"). If the patient asks you questions during the encounter, you should answer them to the extent you can. Upon completing your patient encounter, thank the patient for his/her time and indicate that you are going to review the case with your faculty supervisor. Then excuse yourself, and exit the room. You may leave the room

early if you finish before the end of the 15-minute period, but once you exit the patient room, you may not re-enter for any reason.

Phase 1 Post-encounter stations

After completing each 15-minute patient encounter, you will have 10 minutes to complete a post-encounter station. Post-encounter stations will direct you to complete one of two types of activities.

(a) After some patient encounters you will type a post-encounter "SOAP" note at a computer station. You do not have the option of hand-writing your notes. Based upon your immediately preceding patient encounter, this note will include

History and Physical Examination
Record your findings on interview and PE in either narrative or bullet form, including all pertinent positive and negative findings. For example, in a patient with chest pain, it is just as important to record that a patient DID NOT have relevant findings such as shortness of breath, as it is to record pathologic symptoms/findings the patient DID have. Be certain that your written note reflects only those questions you asked and exam maneuvers you performed. Documenting actions that did not occur may be interpreted as falsifications, and are grounds for a failing grade. Also avoid "overdocumentation" (e.g., CN II-XII intact, when only selected nerves were tested).

Differential Diagnosis for the most important problem(s)
List a rank-ordered differential diagnosis for the highest priority problem(s) on interview and/or physical examination. These diagnoses should follow logically from the interview/exam findings you document. For example, a diagnosis of "hyperthyroidism" is not credible if you fail to ask questions related to that diagnosis, or fail to perform and document a thyroid gland exam.

Supportive Data
Record the pertinent positive and negative elements of the history and the physical exam for each differential diagnosis you list in the differential diagnosis section for each patient encounter.

Initial Diagnostic Management Plan
Provide your initial recommendations for initial diagnostic interventions, such as laboratory tests, X-rays, and consultations with other health care providers. Initial tests are those you would order now as a group, not those dependent on the results of each other. This is also where you would list genital, rectal, or pelvic examinations, if you believe such examinations are indicated. It is not necessary to include therapeutic interventions, such as medications.

(b) After some patient encounters you will complete mannequin/patient/computer-based physical diagnosis tasks that assess examination technique and ability to detect and/or classify pathologic findings. **These tasks may not be related to your immediately preceding patient encounter**. In some cases, you will enter your findings at a computer station. Such tasks may include, but are not limited to fundoscopic examination using an ophthalmoscope, ear examination using an otoscope, heart and/or lung auscultation using a stethoscope, BP determination using a sphygmomanometer, rectal and prostate examination on a mannequin, breast examination on a standardized patient, or physical examination of other organ systems. You may also find tasks which include interpretation of studies, identifying the most likely underlying medical condition or patient management exercises. Such tasks may include, but are not limited to lab results, radiographs, electrocardiograms, arterial blood gases, medication selection, etc.…)

Phase 2 Post-encounter stations

Phase 2 post-encounter stations are the same as Phase 1 as described above, with the following exceptions:

(1) All patient encounters are followed by a post-encounter note, not a mannequin/patient/computer-based physical diagnosis task. These notes will be hand-written.

(2) All patient encounters include a patient "revisit" opportunity. After the 10-minute note-writing period, you will have the opportunity to revisit the patient for a brief period, if you wish to acquire additional information on interview or physical exam, or provide the patient additional information. You will then have a brief period to update your written note, if you wish to do so.

Oral Presentation and Case Discussion With Faculty (Phase 2 only)

After completion of your patient cases and post-encounter stations in Phase 2, you will meet with one or two faculty members. These faculty will have observed your work by video connection, and will have copies of each of your post-encounter notes (as will you).

Oral Presentation ~ 5 minutes
The faculty will begin the encounter by asking you to make a brief (5 minute) oral presentation of at least one of the cases they observed. This will lead into the faculty asking you questions about this encounter, or any of the other cases you completed.

Discussion ~ 25 minutes
The faculty will ask you questions, including requests for you to explain your written note, differential diagnosis, and diagnostic plan on one or more of the cases. Their emphasis will be to determine if:

A. You can explain your differential diagnoses based on the data you collected;
B. You can justify your diagnostic management based on your data and diagnoses; and
C. You can explain the pathophysiologic principles that underlie the patients' problems; and

Feedback and Self-Evaluation (Phase 2 only)

The faculty may then excuse you to allow them to complete their evaluation forms. They may also ask you for your impressions of your performance on the interview, physical examination, oral presentation, written notes, and discussion phases of the exercise. They may be interested in your assessment of your strengths and weaknesses, and what you would do differently if you were to encounter specific challenges again. This information is part of the professional behavior component of the exercise.

The faculty will tell you whether you **PASSED** the exercise or will be required to **REPEAT** the exercise. The faculty will also review their conclusions about your performance with you, with particular attention to the categories on the exercise performance evaluation form:

Observation During Medical Interview
Progresses from open-ended to directed questions
Organized
Relates well to patient
Obtain important content specific to the cases

Observation During Physical Examination
Technique is appropriate
Relates well to patient
Examines appropriate body regions

Oral Communication With Patient and Physician
Fluent and understandable
Organized
Counsels patient appropriately

Problem Solving
Identifies pertinent positive/negative findings
Identifies pertinent diagnoses
Identifies pertinent diagnostic plan
Explains and justifies decisions

Professional Behavior
Solicits/addresses patient questions and concerns
Treats patient with respect
Accepts criticism; able to identify own limitations

Completion of Exercise Evaluation Forms (Phase 1 and Phase 2)

Your evaluation will be completed at the end of your final computer station.