

structure and function. This results in a large amount of information compressed into five weeks.

Undoubtedly, expanding the course from five to six weeks as planned for this year, will allow students more time to assimilate the material. In addition, other changes are recommended and in process to make the course more acceptable to students while maintaining the integrity and rigor of the course.

Strengths:

- 1) All module objectives were covered by lecture, five in small groups, and three by lab. All but two objectives were covered by at least two activities.
- 2) Dr. Thame's review sessions were rated highly, and viewed as extremely helpful in integrating basic science into clinical settings.
- 3) Small groups were identified by over 90% of the students as facilitating learning of the module material and concepts.
- 4) The GI module has the highest percentage of exam questions in NBME format of any other module (58% cumulative, 38% on mid-term and 74% on the final exam).
- 5) The GI system mean was the best UASOM performance of all eight organ system scores for the most recent Step I results.

Weaknesses:

- 1) In three of five weeks, students contact time exceeded the recommended 20 hours per week (compared to 1/5 in 2009/10).
- 2) Lecture accounted for 58.8% of student contact time, exceeding the recommended <50%.
- 3) 50% of students felt that the mid-term exam did not test understanding of the module content.
- 4) Students felt they did not receive timely and adequate feedback to enable them to learn from their mistakes.
- 5) The EBM project was rated by most students as "not helpful."
- 6) Professionalism and ethics was the only UASOM theme not covered.
- 7) Some lectures used excessive slides and details which were unnecessary.

Recommendations:

- 1) Increase the length of the module to six weeks (done).
- 2) Review the lectures for content, with the goal to:
 - a) Reduce excessive detail
 - b) Reduce excessive slides
 - c) Emphasize salient information corresponding to the ITO
- 3) Convert some lectures or labs into a self-learning format for students to do independently.
- 4) Consider increasing the number of small groups.
- 5) Eliminate the EBM component (done).
- 6) Compose ARS questions in NBME format to test knowledge rather than just monitor attendance.
- 7) Prepare exam questions in NBME format to test application of knowledge proportionate to the emphasis in lecture.
- 8) Provide more review sessions before and following exams.

SUMMARY OF THE SELF-STUDY

- I. Module Objectives and Content
- II. Methods of Instruction and Assessment
- III. Student Outcomes
- IV. Student Evaluation of Module
- V. Evaluation of Lectures and Preceptors
- VI. Impact of Changes from Last Year

I. MODULE OBJECTIVES AND CONTENT

- Objectives were clearly stated in the course syllabus. All six main SOM objectives were addressed, and all ACGME competencies were addressed except Interpersonal/Communication Skills.
- All seven module objectives state what students are expected to learn, and six are above the lowest level (Knowledge) in Bloom's Taxonomy. While the objectives did not specify an EBM activity, one was included in the module.
- Under the Step I content area under GI, most items were covered with few exceptions, some of which are covered in other modules. The exceptions were noted and related mainly to nutritional disorders, systemic and degenerative disorders, and treatments for pancreatic and liver disorders.
- All SOM themes were addressed with the exception of Professionalism and Ethics.

II. METHODS OF INSTRUCTION AND ASSESSMENT

- All module objectives were covered by lecture, five by small group, and three by lab.
- Student contact hours were divided as follows:

Lecture	58.8% (exceeding the 50% recommendation)
Lab	25.5%
Review	11.8%
Small group	3.9%
- Student contact time was greater than the recommended 20 hours/week in 3/5 weeks (compared to 2009-2010) with the highest concentration in Week 1.
- Performance was assessed as follows, with exams and quizzes accounting for 91.3% of the Knowledge component.

Individual/Knowledge Performance – 80% of total
Mid-term and final 70%

Lab practical	2%
Anatomy quizzes (3)	3%
EMB project	5%

Individual and Group Performance

Small group	18%
Attendance	2%

- More test items were in NBME format than for any other organ module: 38.8% for mid-term, 74% for final. Reliability quotients were in the moderate category at 0.76.
- Students were evaluated in small groups using the Professional Form, with the following results:

Acceptable:	92.3%
Commendation:	7.1%
Unacceptable:	0.6% (1 student)

III. STUDENT OUTCOMES

- 77.2% of students attended >70% of lectures (standard is 50-80%, required \geq 70%).
- The mean module raw score was 84.2 (cp. to 84.3 for 2009-10). Five students failed the module based on the knowledge component for 2010-11 (cp. to 4 for 2009-10). The knowledge component mean is 82.6 (cp. to 82.5 in 2009-10). Performance on the GI questions was the highest of the organ modules on the latest Step I scores for UASOM.

IV. STUDENT EVALUATION OF THE MODULE

Students were highly critical of multiple aspects of this module, rating it the lowest or second lowest of all first year modules in the majority of core items. Overall quality of the module was rated by 73% of the class as satisfactory to outstanding with an overall rating of 3.2, the lowest of all first year modules. As noted in the summary, this appears to be related in large measure to the difficulty of transitioning from a relatively relaxed module to a module that is densely packed and front-loaded with challenging material.

- The most problematic areas were related to computer-based resources and projects. Both the class and the nominal group felt that the EBM assignment was superfluous, if not a distracter to their learning.
- ARS was viewed the lowest of all areas of evaluation.

- Small groups were viewed highest of all the learning modalities with 87% of students agreeing to strongly agreeing on their value.
- Only 53% of students agreed or strongly agreed that the lectures were useful. Certain lecturers who used excessive slides and failed to follow ITOs were criticized most.
- “Ability to apply concepts” was rated by 49% of the class as the most emphasized learning outcome.
- “Recall of facts/definitions” was rated most emphasized by 36% and least by 38%.
- Quality of faculty was rated as excellent by 23% of the class, and satisfactory by 55%.
- The NGT evaluations were congruent with the overall student evaluations, and are reflected in the overall strengths/weakness and recommendations outlined above.

V. EVALUATION OF LECTURERS AND PRECEPTORS

Lecturer Ratings were based on a scale of 1 – 5, with:

- *2 = Occasionally fails to meet expectations
- 3 = Meets expectations
- 4 = Exceeds expectations
- 5 = Far exceeds expectations

- Mean lecturer ratings were about the same as other first year organ-based modules, ranging from 2.5 to 4.4. Only 2 lectures fell below 3.0, and only 2 had > 50% of students give them at least one rating < 3.0.
- 78% rated faculty as satisfactory to excellent.

Preceptor ratings were based on a scale of 1 – 9, with:

- 7 – 9 = Excellent
- 4 – 6 = Satisfactory

- The mean preceptor ratings were slightly higher than the combined means for the other MS-I organ modules in 2010-11, at 7.1, with no preceptor receiving a score 7.0.
- Based on overall teaching effectiveness, the range was 6.3 – 8.8. No preceptor had > 50% of students giving at least one rating < 4.0.

73% of students rated the overall quality of the faculty as satisfactory to outstanding, with an overall rating of 3.2, the lowest of all first year modules.

VI. EFFECT OF CHANGES FROM LAST YEAR

This is the first review of this module under the current review process, so no recommendations were set forth for 2010-11. Some changes were made by the preceptors from 2009-10 to 2010-11:

Attendance requirement was changed from 80 to 70%. Missing lectures resulted in point(s) deduction.

“Integrated Digestion” lecture was added.

Added “Liver Video” showing transplant surgery

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