

COURSE SCHEDULE (www.FranklinDexter.net)

INSTRUCTORS are Franklin Dexter, MD, PhD, Professor, Departments of Anesthesia and Health Management & Policy, and Ruth E. Wachtel, PhD, MBA, Associate Professor, Department of Anesthesia.

PURPOSE OF COURSE is to teach participants how to apply principles of operations research to solve problems in the operating room and perioperative environment:

- Monitoring the operational and financial performance of surgical suites and anesthesia groups,
- Formulating problems in the perioperative setting that can be solved using operations research,
- Applying the principles of operations research to solve common problems, such as issues involved in planning of block time, case scheduling and assignments, staffing levels, financial management, and strategic planning,
- Identify in-house expertise to aid in problem-solving and determining whether outside consultants are needed,
- Evaluating current decision-support systems.

INTENDED AUDIENCE includes surgeons, anesthesiologists, CRNAs, nurse managers, mid-level administrators, hospital engineers and other analysts responsible for the organization and delivery of surgical care. Participants should have knowledge of middle/high school level algebra, Excel functions, and basic statistics (e.g., Student's t-test). The course is especially relevant to analysts from other fields preparing to work in healthcare.

GROUP AND EVENING CASES are an integral part of the course. All teams include both clinicians and analysts. Many of the cases' questions include electronic literature searching using publicly available materials. The cases help participants learn which techniques should be applied to different types of problems, identify personnel at their hospitals with the skills needed to apply those techniques, and present results to hospital stakeholders.

FRIDAY, FEBRUARY 19

8:00 AM Use of economically rational ordered priorities to make patient flow decisions

Material on which lecture will be based:
Dexter F, Epstein RH, Traub RD, Xiao Y. *Making management decisions on the day of surgery based on OR efficiency and patient waiting times.* Anesthesiology 101: 1444-1543, 2004

11:15 AM Group problem solving and lunch

1:00 PM Incorporating uncertainty into decision-making

3:00 PM 4 hr for groups to complete cases

SATURDAY, FEBRUARY 20

8:00 AM Allocating OR time operationally (few months before day of patient care)

Material on which lecture will be based:
McIntosh C, Dexter F, Epstein RH. *Impact of service-specific staffing case scheduling, turnovers, and first-case starts on anesthesia group and operating room productivity: tutorial using data from an Australian hospital.* Anesthesia & Analgesia 103: 1499-1516, 2006

9:45 AM Allocating OR time tactically based on utilization (1 yr before day of patient care)

Material on which lecture will be based:
Wachtel RE, Dexter F. *Tactical increases in OR block time for capacity planning should not be based on utilization.* Anesthesia & Analgesia 106: 215-226, 2008

11:00 AM Group problem solving and lunch

1:30 PM Allocating OR time tactically based on financial and strategic criteria

Material on which lecture will be based:
Dexter F, Ledolter J, Wachtel RE. *Tactical decision-making for selective expansion of operating room resources incorporating financial criteria and uncertainty in sub-specialties' future workloads.* Anesthesia & Analgesia 100: 1425-1432, 2005

4:15 PM Discussion of cases from Friday

5:00 PM 2 hr for groups to complete cases

SUNDAY, FEBRUARY 21

8:00 AM Economics of small reductions in OR times and turnover times

10:00 AM Financial impact of differences among hospitals

Material on which lecture will be based:
Wachtel RE, Dexter F, Lubarsky DA. *Financial implications of a hospital's specialization in rare physiologically complex surgical procedures.* Anesthesiology 103: 161-167, 2005

10:45 AM Group problem solving and lunch

1:00 PM Empirical methods for staffing and assignments

Material on which lecture will be based:
Dexter F, Epstein RH. *Optimizing second shift OR staffing.* AORN Journal 77:825-830, 2003

2:30 PM Physician agreements: Anesthesia institutional support and Surgeon block time

Material on which lecture will be based:
Dexter F, Epstein RH. *Calculating institutional support that benefits both the anesthesia group and hospital.* Anesthesia & Analgesia 106: 544-553, 2008

4:00 PM Discussion of cases from Saturday

5:00 PM 2 hr for groups to complete cases

MONDAY, FEBRUARY 22

8:00 AM Discussion of cases from Sunday

9:15 AM Differentiating among hospitals and surgical practices

Material on which lecture will be based:
Wachtel RE, Dexter F. *Differentiating among hospitals performing physiologically complex operative procedures in the elderly.* Anesthesiology 100: 1552-1561, 2004

10:30 AM Group problem solving

12:00 NOON End of course



COURSE FEE (includes lunch & afternoon break):

- \$2000 for first participant from an organization
- \$1500 for each additional participant from an organization when forms & payment are sent at the same time
- \$1500 for a registrant from previous course

There will be a \$100 cancellation fee for administrative costs up to 4 wk before the course and \$500 fee afterwards

**SEND CHECK PAYABLE TO:
THE UNIVERSITY OF IOWA**

MAIL TO: Department of Anesthesia
Operations Research-6 JCP
University of Iowa
Iowa City, IA 52242

FAX REGISTRATION FORM TO: +1 (603) 947-1304

For hotel accommodations, call the Hampton Inn Iowa City at 319-351-6600. Use the "University of Iowa Operations Research" course group rate of \$95.00 plus tax. Reservations need to be made by February 1, 2010.

The Eastern Iowa Airport (CID) is located 30 minutes from Iowa City. The airport is served by American, Delta, Northwest and United Airlines. Transportation to Iowa City includes Airport Express (www.limosbyexpress.com, 800-383-2219).

Let us know if you have dietary or special needs.

For travel questions, contact Jodi Kazerani at Jodi-Kazerani@UIowa.edu or 319-353-8605.

First Name: _____ Last Name: _____

Title: _____ Degree(s): _____

Organization: _____

Mailing Address: _____

City: _____ State _____ Zip Code: _____

Daytime Phone: _____

Email: _____

How did you hear about the course? _____

Please answer the following questions to assist in group assignments:

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|---|-----|----|
| Have you ever participated in the decision to move a surgical case from one OR to another? | YES | NO |
| Have you ever participated in a decision influencing physician recruitment? | YES | NO |
| Have you ever studied statistics more advanced than the prerequisite knowledge? | YES | NO |
| Have you ever performed linear programming, used Monte-Carlo simulation such as @Risk or Crystal Ball, or created a quality control chart with limit lines? | YES | NO |
| Will you be bringing a laptop computer with Excel 2003 or later? | YES | NO |

The course can alternatively be hosted by a hospital or other facility for an unlimited number of participants. Download www.FranklinDexter.net/Contracts/ContractCalculatOR.doc and typically budget 3.5 days for the course, 1 day for preparation ahead of time, and 1 day for travel to/from the site, total \$13,750 plus Dr. Dexter's travel expenses. Detailed specifications are sent for the room's setup, computer and projector requirements, etc., to be arranged by the host.