



# Undergraduate Medical Education University of Toledo College of Medicine

*Imran I Ali MD*

*Professor of Neurology*

*Associate Dean for Clinical Medical Education,  
Professionalism and Diversity*

# National Trends

- National trends
  - Competency based education
  - Clinical Skills
    - Observed and assessed
  - Integration of basic and clinical sciences
  - Longitudinal Integrated Curriculum
  - Simulation
  - “Hot Topics”
    - Diversity, cultural competency, public health, geriatrics and many others
  - Greater LCME oversight

Cellular and Molecular Biology 11 weeks	Human Structure/Development 14 ½ weeks	Neuroscience and Behavior 9 weeks
--	---	--------------------------------------

Integrative Pathophysiology (Problem based clinical cases)

Clinical Decision Making

Immunity & Infection 12 ½ weeks	Organ Systems 20 weeks
------------------------------------	---------------------------

Integrative Pathophysiology (Problem based clinical cases)

Clinical Decision Making

Bridge to Clerkship (one week)

Internal Medicine 12 weeks (10)	Surgery 12 weeks (10)	Pediatrics 6 weeks (5) Ob/Gyn 6 weeks(5)	Psychiatry 6 weeks(5) Family Med. 6 wks(5)
------------------------------------	--------------------------	---	---

Elective (4 weeks)

Neurology 4 weeks (5)	Acting Internship 4 weeks	Electives 24 weeks	Basic Science Selective 4 weeks	Flex 8 weeks
--------------------------	------------------------------	-----------------------	------------------------------------	--------------

**The University of Toledo College of Medicine 4 year curriculum**

# Clerkship

- Goals and Objectives
- Institutional
  - Educational Program Objectives (EPOs)
- Discipline Specific
  - Educational Course Objectives (ECOs)

# Clerkship

- Required Clerkships
  - Internal Medicine
  - Surgery
  - Pediatrics
  - Family Medicine
  - Obstetrics and Gynecology
  - Psychiatry
  - Neurology

# Bridge to Clerkship

## Informational Sessions

- Introduction to Clinical Rotations
- Clinical skills review
- Procedural and regulatory issues
- Cognitive and Non- cognitive skills
- Health Care Delivery Teams

## Breakout sessions

- Clinical Presentations
- Documentation and note writing workshop
- Admission , order and prescription writing
- Team Leadership
- Procedural skills
- Laboratory Diagnostic workshop
- Radiology Workshop
- Physician Patient Relationship

# UNDERGRADUATE MEDICAL EDUCATION

## YEAR 3 - Sample Schedule

2010-2011

(50 weeks)

**Bridge Course** 1 wk Monday, June 28 – Friday, July 2, 2010

07.06.10

12.23.10 – 01.02.11  
Winter Break

06.24.11

<b>Block 1a</b> 5 wks	<b>Block 1b</b> 5 wks	<b>Block 2a</b> 5 wks	<b>Block 2b</b> 5 wks	<b>Block 3a</b> 5 wks	<b>Block 3b</b> 5 wks	<b>Block 4a</b> 5 wks	<b>Block 4b</b> 5 wks	<b>Block 5a</b> 5 wks	<b>Block 5b</b> 5 wks
--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------	--------------------------

Brain & Behavioral Sciences (10 wks)	Women & Child Health (10 wks)	General Medical /Surgical Specialty (10 wks)	Surgery (10 wks)	Internal Medicine (10 wks)
Block 1a: Neurology	Block 2a: Obstetrics & Gynecology	Block 3a: Family Medicine	Blocks 4a & 4b	Blocks 5a & 5 b
Block 1b: Psychiatry	Block 2b: Pediatrics	Block 3b: Electives (4 wk) (1 wk – Flex Time)		

Block 1a begins: July 6, 2010  
Block 1b begins: Aug. 9, 2010

Block 2a begins: Sept. 13, 2010  
Block 2b begins: Oct. 18, 2010

Block 3a begins: Nov. 22, 2010  
Block 3b begins: Jan. 3, 2011

Block 4a begins: Feb. 7, 2011  
Block 4b begins: March 14, 2011

Block 5a begins: Apr. 18, 2011  
Block 5b begins: May 23, 2011

Thanksgiving Break: November 25, 2010 – November 28, 2010

Winter Break: December 23, 2010 – January 2, 2011

\*\*Please note these COM holidays in addition to winter break  
Monday, July 5, 2010 – Independence Day  
Monday, September 6, 2010 – Labor Day

# UNDERGRADUATE MEDICAL EDUCATION

## YEAR 4 - Sample Schedule

2010-2011

(40 Weeks)

07.06.10		12.18.10 – 01.02.11 Winter Break				03.26.11 – 04.03.11 Spring Break			Graduation Day 06.03.11
<b>Block 6a/6b</b> 4 wks	<b>Block 7a/7b</b> 4 wks	<b>Block 8a/8b</b> 4 wks	<b>Block 9a/9b</b> 4 wks	<b>Block 10a/10b</b> 4 wks	<b>Block 11a/11b</b> 4 wks	<b>Block 12a/12b</b> 4 wks	<b>Block 13a/13b</b> 4 wks	<b>Block 14a/14b</b> 4 wks	<b>Block 15a/15b</b> 4 wks
4 weeks Acting Internship	24 weeks of Electives (maximum of 12 wks in specific discipline)						8 weeks Flex Time		
4 weeks Basic Science Elective									

Thanksgiving Break: November 25, 2010 – November 28, 2010

Winter Break: December 17, 2010 – January 2, 2011

Spring Break: March 26, 2011 – April 3, 2011

\*\*Please note these COM holidays in addition to winter break

Monday, July 5, 2010 – Independence Day

Monday, September 6, 2010 – Labor Day

Thursday, November 11, 2010- Veteran's Day

Monday, January 17, 2011 – Martin Luther King Day

Monday, May 30, 2011 – Memorial Day

# UNDERGRADUATE MEDICAL EDUCATION



COLLEGE OF MEDICINE

THE UNIVERSITY OF TOLEDO

**THE UNIVERSITY OF TOLEDO COLLEGE OF MEDICINE  
(PSYCHIATRY AND NEUROLOGY) CLERKSHIP  
SFY 11**

	<b>Psychiatry</b>	<b>Psych NBME</b>	<b>Neurology</b>	<b>Neuro NBME</b>
<b>Group 1</b>	Weeks 1-5	Monday, Week 6	Weeks 6-10	Friday, Week 10
<b>Group 2</b>	Weeks 6-10	Friday, Week 10	Weeks 1-5	Monday, Week 6

		10 Days					11 Days					11 Days					11 Days																																		
		Week 1		Week 2			Week 3			Week 4			Week 5		Week 6			Week 7			Week 8			Week 9			Week 10																								
		M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F	M	T	W	T	F										
<b>Psych</b>																																																			
Group 1A	Psychiatry Orientation – Groups 1 & 2	Psychiatry Clinical Sites										Psychiatry Clinical Sites										(Neurology)										(Neurology)										Psych NBME – Grp 2									
Group 1B		Psychiatry Clinical Sites										Psychiatry Clinical Sites										(Neurology)										(Neurology)										Psych NBME – Grp 2									
Group 2A	Neurology Orientation – Groups 1 & 2	(Neurology)										(Neurology)										Psychiatry Clinical Sites										Psychiatry Clinical Sites										Psych NBME – Grp 2									
Group 2B		(Neurology)										(Neurology)										Psychiatry Clinical Sites										Psychiatry Clinical Sites										Psych NBME – Grp 2									
<b>Neuro</b>																																																			
Group 1A	Psychiatry & Neurology Combined Teach – Groups 1 & 2	(Psychiatry)										(Psychiatry)										Neurology Outpatient										Neurology Inpatient					Neurology Consult					Neurology NBME – Grp 1									
Group 1B		(Psychiatry)										(Psychiatry)										Neurology Inpatient					Neurology Consult					Neurology NBME – Grp 1																			
Group 2A	Psychiatry & Neurology Combined Teach – Groups 1 & 2	Neurology Outpatient										Neurology Inpatient					Neurology Consult					(Psychiatry)										(Psychiatry)										Neurology NBME – Grp 1									
Group 2B		Neurology Inpatient					Neurology Consult					Neurology Outpatient										(Psychiatry)										(Psychiatry)										Neurology NBME – Grp 1									

Courtesy Dr. Smith and Ramsey Williams

# Clerkship

- Clerkship Processes
  - Orientation
  - Clinical Experience
  - Didactics
  - Standardized Patients
  - Objective Structured Clinical Exercise (OSCE)
  - Informal teaching
    - Bedside
    - “Mini-lectures”
  - Assigned Duty Hours

# Role of the Clerkship Director

- Recommended qualifications of a clerkship director:
  - Experience in didactic and/or clinical teaching of medical students
  - Knowledge of the institution's pre-clinical and clinical curriculum
  - Good communication skills and interpersonal relationships
  - Flexibility/adaptability
  - Research interests in education

# Role of the Clerkship Director

- Curriculum Design and Implementation
- Collaborate with the Dean and Clerkships
- Orientation of students
- Develop a teaching schedule
- Develop a clinical schedule
- Teach residents and faculty on how to teach
- Evaluate and grade students
- Coordinate with Office of Medical Education for compliance with accreditation standards
- Mentor and Advisor

# Role of Clerkship Coordinator

- Staff
- Akin to Residency Program Coordinator
- Highly skilled professional with expertise and interest in medical education
- Coordinates schedules and liaisons with CD
- Collects data and provides information

# Clinical Skills Education

## Explicit Developmental Approach

Basic

Clerkship

Advanced

Bloom's Taxonomy of Cognitive Skills (1956)	Dreyfus Levels of Skill Performance (1986)	Miller's Learning Pyramid (1990)	Pangaro's RIME Scheme (1999)
Knowledge Comprehension Application Analysis Synthesis Evaluation	Novice Advanced beginner Competent Proficient Expert Master	Knows Shows Shows How Does	Reporter Interpreter Manager Educator

# Role of MS III

- Learn a set of clinical skills
  - History
  - Examination
  - Knowledge and concepts of medical disorders
  - Procedural skills
- Provide exceptional medical care
- Contribute to patient management
- Learn concepts of EBM and life long learning

# Student Responsibilities

- Be part of the health care delivery team
- Fulfill all educational requirements
  - Write-ups
  - History and Physical Examination
  - Presentation of information
  - Procedural skills
  - Maintain patient logs
  - Attend lectures and other required sessions

## Diagnosis Categories per Student by Clerkship

Family Medicine Clerkship

Term: *Spring 2009* Course: *FMMD701* Section: *009*

Starts: *2/16/09* Ends: *3/27/09*

Reported: *6/18/09*

Category Name	Required Quantity	Primary Diagnosis Total	Secondary Diagnosis Total	Percent Complete
Cardiovascular disease	5	26	0	100%
Dermatologic disorders	5	10	0	100%
Endocrine disease	5	20	0	100%
Female genitourinary	5	15	0	100%
Gastrointestinal disease	5	13	0	100%
Male genitourinary	5	8	0	100%
Musculoskeletal disease	5	18	0	100%
Neurologic	5	11	0	100%
Other	5	25	0	100%
Preventative care	5	14	0	100%
Psychiatric	5	10	0	100%
Respiratory disease/ENT disorders	5	29	0	100%
Societal issues	5	7	0	100%

# MS IV

- Electives
- Acting Internship
  - Expected to write notes and orders
  - Perform procedures under close supervision
  - Be able to function independently (still requires supervision)

# Expectations

- Professionalism
  - Respect
    - Attendance
    - Dress
    - Team
    - Confidentiality
  - Self directed learning
  - Recognize limitations
  - [http://www.utoledo.edu/policies/academic/college\\_of\\_medicine/index.html](http://www.utoledo.edu/policies/academic/college_of_medicine/index.html)

# Feedback

- Summative
- Formative
  - Meant to improve performance
  - Given during rotation both formally and informally
  - Constructive
  - Provides insight (perhaps)
  - In person, in writing or electronically

# Student Evaluation

- Required Clerkships
  - NBME 40%
  - Clinical Performance 40%
  - Departmental Educational Programs 20%

# Clerkship Evaluation

- Standardized Written Examination
  - NBME
- Departmental Educational Program Evaluation
  - OSCE
  - SP
  - Assignments
  - Examination
- Clinical Competency Evaluation

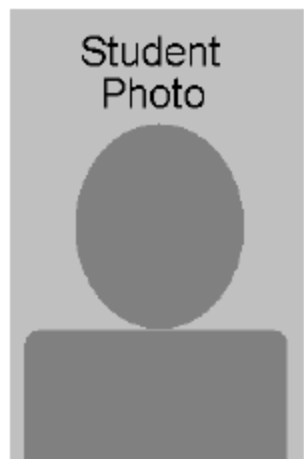
# Grading Policy

- Honors 88 or >
- High Pass 87-75
- Pass 74-40

# Clinical Evaluation

- History taking skills
- Physical examination
- Diagnostic reasoning
- Clinical assessment
- Therapeutic planning
- Procedural skills
- Professionalism

## Required Clerkships Clinical Competency Evaluation



Clerkship:  
 Evaluator:  
 Start Date:  
 End Date:  
 Rotation Number:  
 Site:  
 Site if "Other":

Extensive (More than 10 Hours)  
 Moderate (4 to 10 Hours)  
 Minimal (1 to 4 Hours)  
 No Contact (Less than 1 Hour)

Time Spent with Student:

For each item in each category, please select a value from 1 to 5, or N/A. A selection of N/A will not impact a student's final evaluation score.

- 5 - Exceptional performance for this level of training – far above expected
- 4 - Performance above expected for this level of training
- 3 - Performance appropriate for this level of training
- 2 - Performance less than expected for this level of training – requires occasional intervention
- 1 - Performance not acceptable for student at this level of training – requires frequent intervention
- N/A - Not Applicable/Unable to Evaluate

### History Taking Skills

History is thorough, systematic, logical and accurate  5  4  3  2  1  N/A

Student controls interview and obtains history in a time efficient manner  5  4  3  2  1  N/A

Student established rapport and listens to patient perceptions  5  4  3  2  1  N/A

Student uses vocabulary appropriate to level of patient understanding  5  4  3  2  1  N/A

Data documentation is complete and accurate  5  4  3  2  1  N/A

Patient data is documented in an organized and logical manner  5  4  3  2  1  N/A

### Physical Examination Skills

Exam of breasts.  5  4  3  2  1  N/A

Exam of pelvis.  5  4  3  2  1  N/A

### Clinical Judgment and Diagnostic Skills

Appropriate initial therapeutic plans are formulated for each problem  5  4  3  2  1  N/A

Student justifies appropriate diagnostic possibilities for each problem with avoidance of diagnostic indecision or premature closure  5  4  3  2  1  N/A

The issues of cost-effectiveness and risk to patient vs. outcome are considered when ordering diagnostic studies  5  4  3  2  1  N/A

The student is able to interpret laboratory data using a pathophysiological approach  5  4  3  2  1  N/A

### Oral Case Presentation

Oral presentation is complete and appropriate  5  4  3  2  1  N/A

Presentation reveals that student has done preparatory reading  5  4  3  2  1  N/A

Student identifies patient problems  5  4  3  2  1  N/A

Student openly reveals an appropriate level of knowledge and understanding regarding an assessment and diagnostic plan  5  4  3  2  1  N/A

Student verbally communicates in a logical systematic manner  5  4  3  2  1  N/A

### Self-Education Skills

Student demonstrates the initiative to enhance his/her knowledge through reading and facilitate accurate patient assessments and plans  5  4  3  2  1  N/A

Student is motivated and initiates self-education  5  4  3  2  1  N/A

### Written Data Recording Skills

### Professional attributes and responsibilities

<p>Exceptional, performance above and beyond expectations. Outstanding in attendance, dependability and punctuality in team activities and patient care responsibility. Makes extra effort to be an integral team member by volunteering for higher levels of patient care responsibility.</p> <p><input type="radio"/> 5</p>	<p>Conscientious, makes a consistent effort to be responsible and dependable regarding patient care responsibilities. Makes a noticeable effort to be part of the team.</p> <p><input type="radio"/> 4</p>	<p>Can regularly be relied upon in fulfilling responsibilities as a member of the ward team and in the delivery of patient care.</p> <p><input type="radio"/> 3</p>	<p>Needs reminders in the fulfillment of ward responsibilities including patient care. Allows himself/herself to be too peripheral to active team activities and patient care.</p> <p><input type="radio"/> 2</p>	<p>Cannot be relied upon. Attendance and punctuality are erratic. Student's whereabouts are often unknown. Needs prodding frequently. Am concerned over student's commitment.</p> <p><input type="radio"/> 1</p>	<p>Not observed</p> <p><input type="radio"/> N/A</p>
---	--	---	---	--	--

### Self-Improvement and Adaptability

<p>Outstanding in soliciting and receiving criticism with interest and grace. Able to effect change. Extensive self initiated supplemental reading. Makes an extra effort to learn.</p> <p><input type="radio"/> 5</p>	<p>Accepts criticism and is able to effect change. Self motivated to expand knowledge with supplemental reading.</p> <p><input type="radio"/> 4</p>	<p>Accepts criticism when offered, Makes an effort to change. Does some supplemental as well as required reading.</p> <p><input type="radio"/> 3</p>	<p>Resistant or defensive in accepting criticism. Makes those offering suggestions uncomfortable because of lack of receptiveness.</p> <p><input type="radio"/> 2</p>	<p>Completely unaware of own inadequacies. Refuses to consider or make changes.</p> <p><input type="radio"/> 1</p>	<p>Not observed</p> <p><input type="radio"/> N/A</p>
--	---	--	---	--	--

### Relationships with patients

<p>Makes an extra effort to put patients and family members at ease and appropriately communicating medical information to them. Relates well with difficult patients and/or families. Shows empathy, compassion and respect.</p> <p><input type="radio"/> 5</p>	<p>Consistently relates well to patients and family members. Shows empathy, compassion and respect.</p> <p><input type="radio"/> 4</p>	<p>Relates well to most patients and family members. Seems comfortable with patients and family members, and his/her role as a developing physician.</p> <p><input type="radio"/> 3</p>	<p>Sometimes has difficulty establishing rapport with patients or communicating with them. Not always comfortable interacting with patients.</p> <p><input type="radio"/> 2</p>	<p>Often insensitive to patient's feelings, needs and wishes. Lacking capacity for empathy.</p> <p><input type="radio"/> 1</p>	<p>Not observed</p> <p><input type="radio"/> N/A</p>
--	--	---	---	--	--

### Interpersonal relationships with other members of health care team

<p>Outstanding in respecting the feelings, needs and wishes of all health care team members. Makes an extra effort to be highly</p> <p><input type="radio"/> 5</p>	<p>Relates well to all health care team members. Makes an</p> <p><input type="radio"/> 4</p>	<p>Relates well to most of the health care team members.</p> <p><input type="radio"/> 3</p>	<p>Sometimes has difficulty relating</p> <p><input type="radio"/> 2</p>	<p>Insensitive to needs, feeling and wishes of health care team</p> <p><input type="radio"/> 1</p>	<p>Not observed</p> <p><input type="radio"/> N/A</p>
--	--	---	---	--	--

Comments:

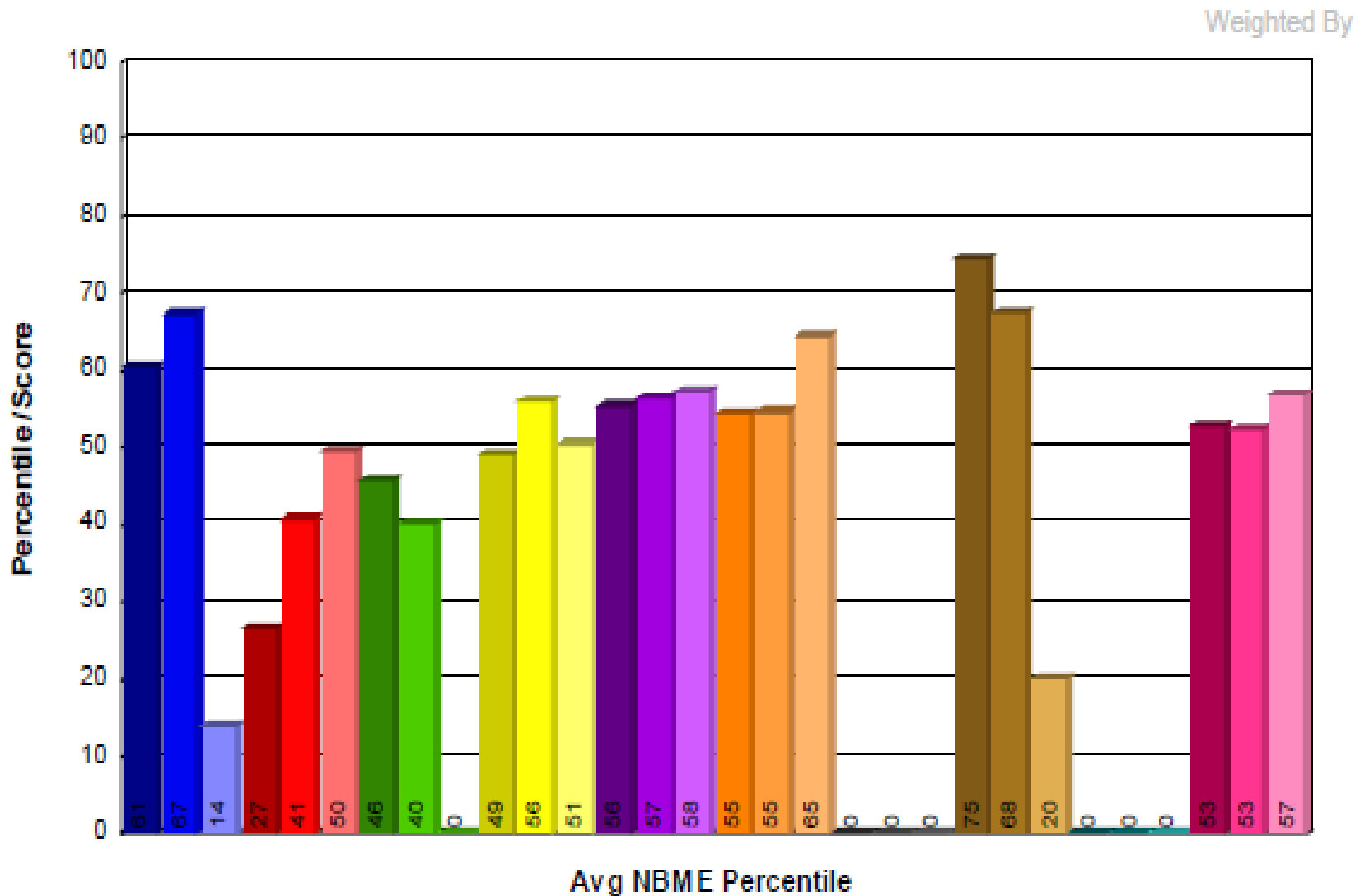
# Clinical evaluation

- Subjective but necessary
  - Residents
  - Faculty
    - Weighted based on time spent
    - Competency based evaluation
- Time sensitive

# Outcomes

- Student satisfaction
- Objective examination performance
- Clinical skills
- Residency performance
- Licensure and MOC

# Outcomes



# UNDERGRADUATE MEDICAL EDUCATION

Clinical Teaching - Required - Attending

Department: OBGY

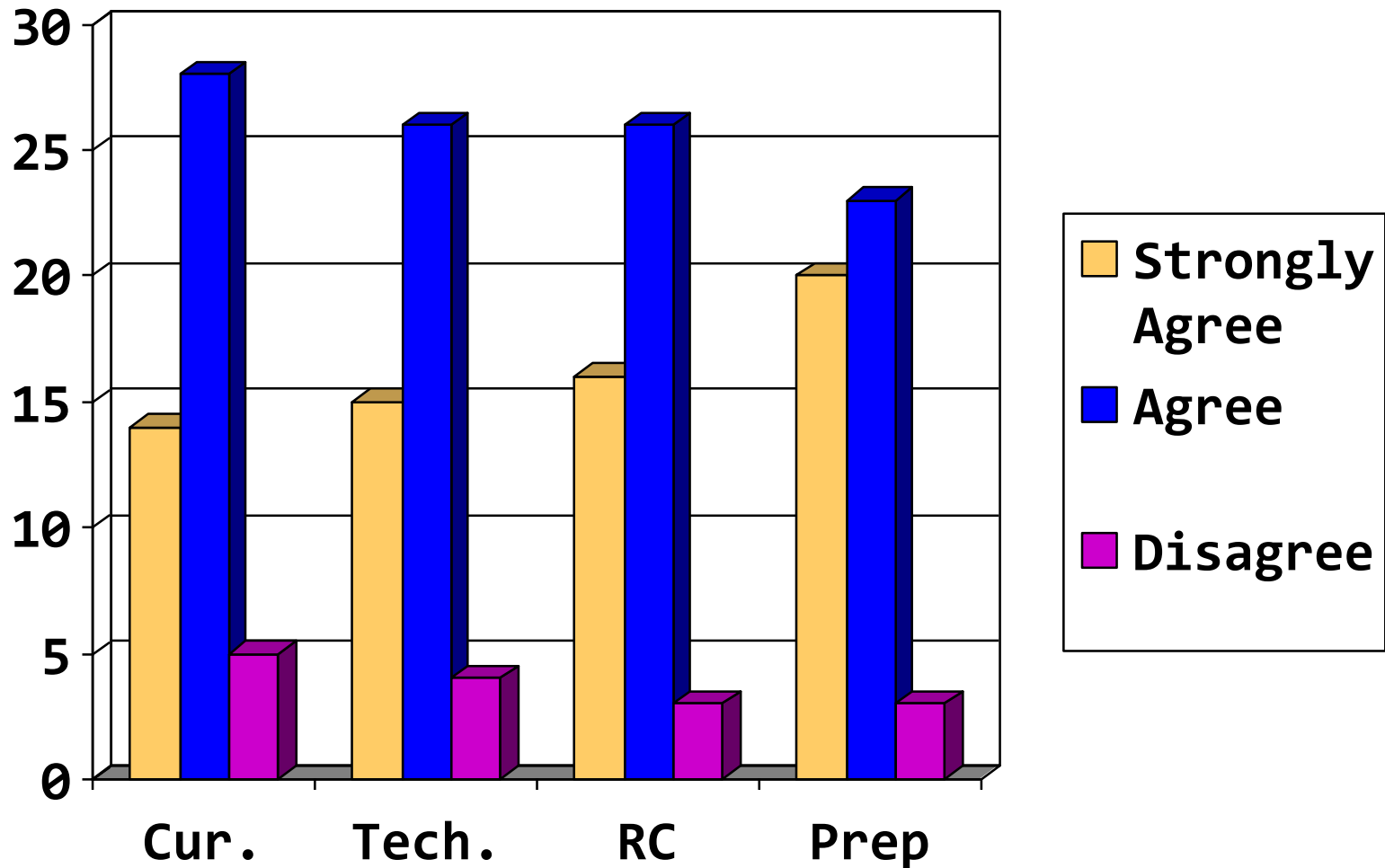
Academic Year 2011 - Term: 201030

System: Promedica Health Systems

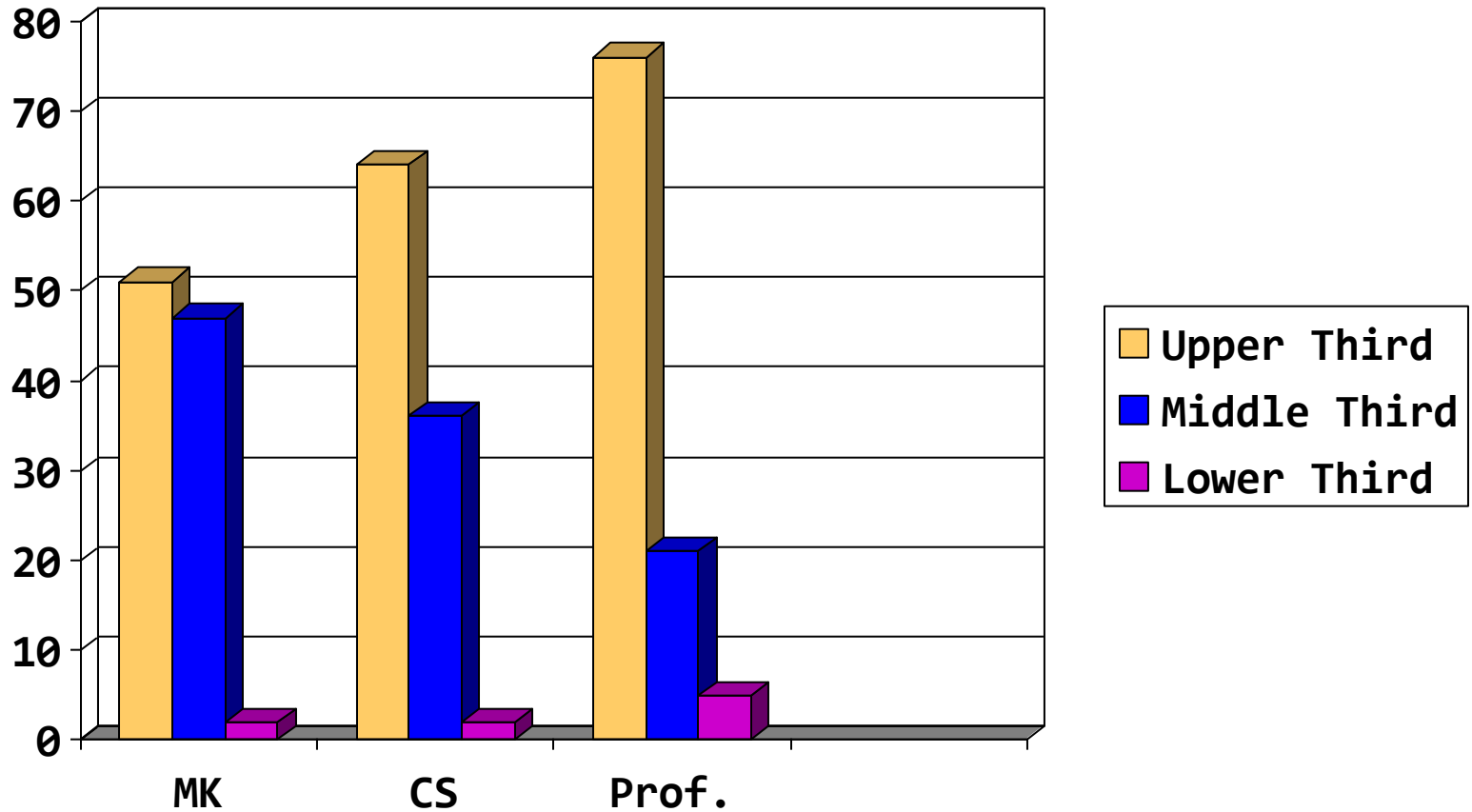
		V Strongly agree	IV Agree	III Neither agree nor disagree	II Disagree	Total
020 . The preceptor seemed interested in teaching.	N	9	1	0	0	10
	%	90%	10%	0%	0%	
030 . The created a positive learning environment, e.g., I was oriented to the schedule, I could easily join in patient care.	N	9	1	0	0	10
	%	90%	10%	0%	0%	
040 . The preceptor demonstrated good interpersonal skills, e.g., I was treated with respect, there were open lines of communication.	N	9	1	0	0	10
	%	90%	10%	0%	0%	
050 . I was given appropriate independence by this preceptor, e.g., allowed to evaluate patients on my own.	N	5	3	2	0	10
	%	50%	30%	20%	0%	
060 . I was given meaningful feedback regarding various aspects of my performance including my patient presentations, evaluation of patients, history taking, and/or	N	5	2	2	1	10
	%	50%	20%	20%	10%	
070 . Instruction was tailored to my needs and current level of competence.	N	6	4	0	0	10
	%	60%	40%	0%	0%	
080 . I was given specific information that helped me improve my knowledge and skills.	N	6	3	1	0	10
	%	60%	30%	10%	0%	

		IV Excellent	III Good	Total
090 . Overall, I would consider the preceptor's teaching to be:	N	6	4	10
	%	60%	40%	

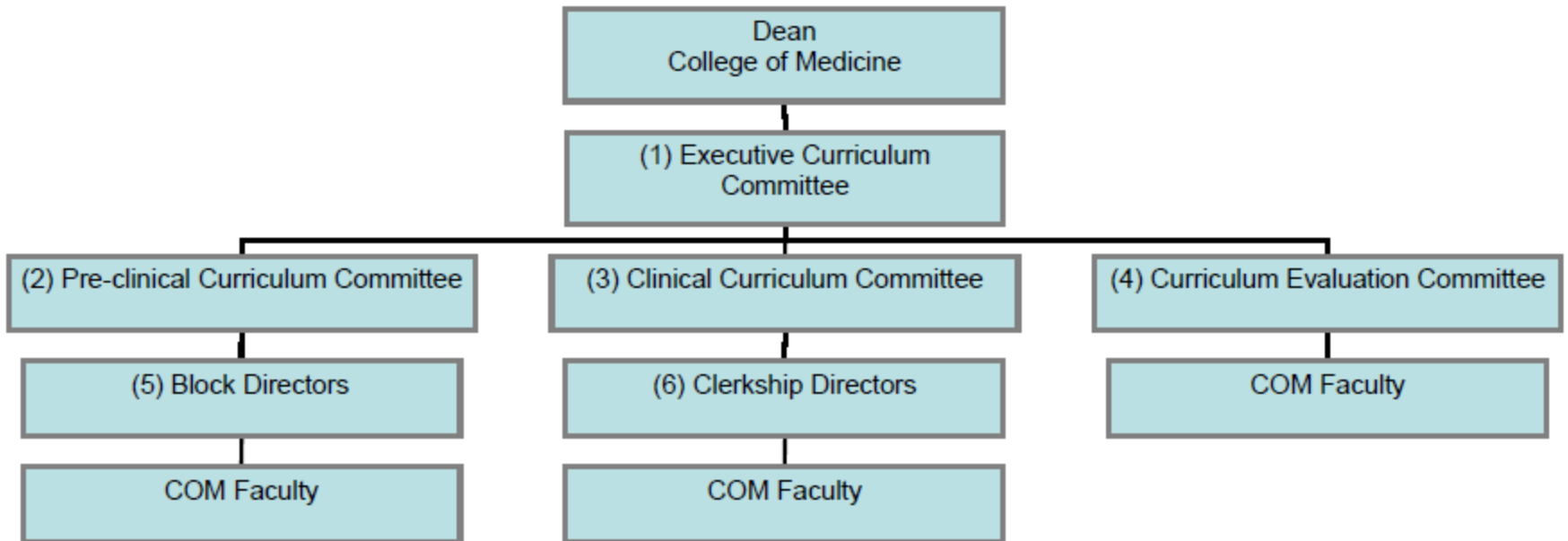
# Graduate Survey



# Graduate Survey



# Curriculum Governance



# Important information

- Curriculum
  - <http://www.utoledo.edu/med/md/curriculum/index.html>
- Evaluation
  - <https://meded.utoledo.edu>
- COM Policies
  - [http://www.utoledo.edu/policies/academic/college\\_of\\_medicine/index.html](http://www.utoledo.edu/policies/academic/college_of_medicine/index.html)

# Q & A



[imran.ali@utoledo.edu](mailto:imran.ali@utoledo.edu)

419.383.4458