University of North Carolina at Chapel Hill
School of Medicine
Curriculum Profile Report

2003-2004 Academic Year

Office of Educational Development
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About this report…

Through ongoing monitoring of the curriculum and its outcomes, the School of Medicine promotes a process of continuous quality improvement in order to ensure an optimal educational experience for our students. This report is one part of that monitoring process. It is intended to provide a summary description of the curriculum and of student characteristics, performance, and perspectives during one academic year. By comparing this report with previous and subsequent annual reports, changes in the curriculum and its outcomes can be traced over time, and areas needing adjustment of content or process can be noted. In addition, we hope these descriptive data will serve as a catalyst for further analysis.

We welcome your ideas. Please direct suggestions for ways to improve this report to:

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Section I: Curriculum Characteristics

Core Competencies of UNC School of Medicine Graduates

Preamble

It is the mission of the School of Medicine to train competent and caring physicians for the state of North Carolina. The school also understands that the process of becoming a physician is a life-long pursuit forged through experience and continued education. Therefore, the training of a medical student does not end after 4 years of formal education. As a corollary, the curriculum cannot expect to incorporate all of those skills that a competent practicing physician acquires during a lifetime of practice and learning. The purpose of the medical school curriculum should be to educate students in the biology, evaluation, and management of those under their care as a foundation on which to build the social, communal, and political understandings that make a complete physician. Our curriculum must also provide the student with an understanding of informatics and the motivation for ceaseless self-development, so that our future physicians can enrich this basic knowledge throughout their careers and provide service to our patients and to society.

The following core competencies are adapted from AAMC MSOP and ACGME/ABMS competencies:

I. **Medical Knowledge.** Students must demonstrate knowledge about established and evolving biomedical, clinical, and cognate (e.g., epidemiological and social-behavioral) sciences and the application of this knowledge in patient care, specifically:

1. demonstrate knowledge of the normal structure and function of the body (as an intact organism) and of each of its major organ systems, across the life span
2. demonstrate knowledge of the molecular, biochemical, and cellular mechanisms that are important in maintaining the body's homeostasis
3. demonstrate knowledge of the various causes (genetic, developmental, metabolic, toxic, microbiologic, autoimmune, neoplastic, degenerative, and traumatic) of maladies and the ways in which they operate on the body (pathogenesis)
4. demonstrate knowledge of the altered structure and function (pathology and pathophysiology) of the body and its major organ systems that are seen in various diseases and conditions
5. demonstrate understanding of the power of the scientific method in establishing the causation of disease and of the efficacy of traditional and nontraditional therapies
6. demonstrate understanding of clinical epidemiology

Core Competencies of UNC School of Medicine Graduates (continued)

7. demonstrate knowledge of biopsychosocial determinants of health and illness and of the economic, psychological, social, and cultural factors that contribute to the development of maladies or, conversely, the promotion of health
8. demonstrate knowledge of the epidemiology of common maladies within a defined population, and the systematic approaches useful in reducing the incidence and prevalence of those maladies
9. demonstrate knowledge of the principles of pharmacology, therapeutics, and therapeutic decision-making
10. demonstrate knowledge of the principles of the emerging disciplines of genomics, proteomics, and bioinformatics
11. demonstrate knowledge of the scientific principles underlying laboratory diagnosis, and the ability to critically evaluate the limitations of diagnostic methodologies

II **Patient Care.** Students must be able to provide care that is compassionate, appropriate, and effective for treating health problems and promoting health, specifically:

1. treat patients compassionately and with respect for their privacy, dignity, individual integrity and culture
2. obtain an accurate medical history that covers all essential aspects of the history, including issues related to age, gender, culture, and socioeconomic status
3. perform both a complete and a symptom-focused examination, including a mental status examination
4. perform routine technical procedures
5. interpret the results of commonly used diagnostic procedures
6. identify the most frequent clinical, laboratory, roentgenologic, and pathologic manifestations of common maladies
7. reason deductively in solving clinical problems
8. construct appropriate management strategies (both diagnostic and therapeutic) for patients with common conditions, both acute and chronic, including medical, psychiatric, and surgical conditions, and those requiring short and long-term rehabilitation
9. recognize patients with immediately life-threatening cardiac, pulmonary, or neurological conditions regardless of etiology, and institute appropriate initial therapy
10. recognize and outline an initial course of management for patients with serious conditions requiring critical care

Core Competencies of UNC School of Medicine Graduates (continued)

11. relieve pain and ameliorate the suffering of patients
12. identify factors that place individuals at risk for disease or injury, select appropriate tests for detecting patients at risk for specific diseases or in the early stage of disease, and determine strategies for responding appropriately

III. Professionalism. Students must demonstrate a commitment to professional service, adherence to ethical principles, and sensitivity to diverse patient populations, specifically:

1. apply the theories and principles that govern ethical decision-making and that address the major ethical dilemmas in medicine, particularly those that arise at the beginning and end of life and those that arise from the rapid expansion of knowledge of genetics, and maintain patient confidentiality
2. show honesty and integrity in all interactions with patients' families, colleagues, and others with whom physicians must interact in their professional lives
3. advocate at all times the interests of one's patients over one's own interests
4. describe the threats to medical professionalism posed by the conflicts of interest inherent in various financial and organizational arrangements for the practice of medicine
5. demonstrate a capacity to recognize and accept limitations in one's knowledge and clinical skills, and the ability to continuously improve one's knowledge and ability
6. demonstrate a commitment to serve individuals, communities, and society
7. demonstrate a commitment to provide care to patients who are unable to pay and to be advocates for access to health care for members of traditionally underserved populations

IV. Practice-Based Learning and Improvement. Students must be able to investigate and evaluate their patient care practices, appraise and assimilate scientific evidence, and improve their practice of medicine, specifically:

1. search for and integrate new evidence regarding diagnosis, prognosis, and treatment of specific diseases and integrate this knowledge into management

Core Competencies of UNC School of Medicine Graduates (continued)

2. engage in continuous learning to stay abreast of relevant scientific advances, especially in the disciplines of genetics and molecular biology
3. retrieve (from electronic databases and other resources), manage, and utilize biomedical information for solving problems and making decisions that are relevant to the care of individuals and populations
4. participate in and conduct continuous quality improvement programs

V. Systems-Based Practice. Students must demonstrate an awareness of and responsiveness to the larger context and systems of health care and the ability to call on system resources to provide care that is of optimal value, specifically:

1. demonstrate an understanding of and competence in referrals to and collaboration with other health care professionals in caring for individual patients and in promoting the health of defined population
2. demonstrate an understanding of the process of identification of the health needs of a community and population, as well as the process of prioritization of those needs
3. demonstrate a commitment to teach other physicians and health care providers
4. describe various approaches to the organization, financing, and delivery of health care
5. demonstrate knowledge of the principles and practices of budgeting, personnel management, and leading interdisciplinary teams

VI. Interpersonal and Communication Skills. Students must demonstrate interpersonal and communication skills that result in effective information exchange and teaming with patients, patients' families, and professional associates, specifically:

1. communicate effectively, both orally and in writing, with patients, patients' families, colleagues, and others with whom physicians must exchange information in carrying out their responsibilities
2. develop empathic, caring relationships with patients based on mutual respect and trust
3. communicate effectively with the public and the media

Table 1.1: **First Year Course Formats**

Course Name (Course Director/s)	Credit Hours	**Class Size**				**Instructional Formats**								
		31-165 students	19-30 students	11-18 students	10 or< students	Lecture	Discuss	Lab	Dissect	Clinical	CAI	Other	Assmt	**Total**
Biochemistry (Chaney)	5.0	73.0			9.0	68.5	9.0						4.5	**82.0**
Cell Biology (Burridge)	1.0	21.5		3.0		19.0	3.0						2.5	**24.5**
Histology (Koch)	2.0	16.0	24.0			12.0		24.0					4.0	**40.0**
Human Anatomy & Embryology (Granger, Sulik)	9.0	53.0			112.0	37.0			112.0				16.0	**165.0**
Immunology (Klapper)	2.0	38.5	4.0			35.5	4.0						3.0	**42.5**
Introduction to Clinical Medicine 1 (Vines)	8.0			92.0	66.0		92.0			60.0			6.0	**158.0**
Introduction to Pathology (Smith)	1.0	9.0	12.5			7.5		12.5					1.5	**21.5**
Medicine and Society (Oberlander, Cross)	2.0	7.5		34.5		7.5	34.5							**42.0**

Legend:	new course director(s)	change in course order	change in course format	includes methods of assessment other than written exams

Table 1.1: **First Year Course Formats** (continued)

Course Name (Course Director/s)	Credit Hours	**Class Size**				**Instructional Formats**								
		31-165 students	19-30 students	11-18 students	10 or< students	Lecture	Discuss	Lab	Dissect	Clinical	CAI	Other	Assmt	**Total**
Microbiology (Cannon, Newbold, Bourret)	6.0	67.0	19.0	18.0		61.5	18.0	19.0					5.5	**104.0**
Molecular Biology & Genetics (Lee, Evans)	2.0	32.0	7.0			28.0	7.0						4.0	**39.0**
Neurobiology (Farel)	4.0	43.0		23.0		37.0	23.0						6.0	**66.0**
Physiology (Goy)	5.0	72.0		15.0		66.0	15.0						6.0	**87.0**
Preclinical Informatics (Juliano)	1.0	6.0									6.0			**6.0**
Total credit & contact hours	48.0	**438.5**	**66.5**	**185.5**	**187.0**	**379.5**	**205.5**	**55.5**	**112.0**	**60.0**	**6.0**		**59.0****	**877.5**

Legend:	new course director(s)	change in course order	change in course format	includes methods of assessment other than written exams

** Total contact time does not include exams or other forms of assessment that do not appear on the class schedule (e.g., take-home exams, write-ups, clinical observation). For more information about forms of student assessment used in the first year, please refer to Table 1.5.

Table 1.2: **Second Year Course Formats**

Course Name (Course Director/s)	Credit Hours	**Class Size**				**Instructional Formats**								
		31-165 students	19-30 students	11-18 students	10 or< students	Lecture	Discuss	Lab	Dissect	Clinical	CAI	Other	Assmt	**Total**
Clinical Medicine Cases (Aleman, Clark, Harris, Busby-Whitehead, Denham) new course	1.0	6.5			12.5	4.5	12.5						2.0	**19.0**
Clinical Epidemiology (Sonis) ⑩	1.0				28.5		26.5						2.0	**28.5**
Endocrinology/Nutrition (Ontjes, Thomas, Harp, Hammett- Stabler) ⑩	2.0	34.0		12.0		31.0	12.0						3.0	**46.0**
Gastrointestinal System (Shaheen, Woosley, Morgan, Russo,) ⑩	3.0	34.5		11.5		33.0	11.5						1.5	**46.0**
Hematology/Oncology (Church, Mitchell, Ma, Dent) ⑩	3.0	33.0		14.0		31.0	14.0						2.0	**47.0**
Humanities & Social Science Selective (Madison, Cross)	1.0			22.0			22.0							**22.0**
Introduction to Clinical Medicine 2 (Aleman)	10.0			61.0	100.0		61.0			90.0			10.0	**161.0**
Musculoskeletal/ Dermatology (Dahners, Morell, Wilson) ⑩	3.0	36.0	19.5		3.5	32.5	19.5			3.5			3.5	**59.0**

Legend:	new course director(s)	change in course order	⑩ change in course format	includes methods of assessment other than written exams

Table 1.2: **Second Year Course Formats** (continued)

Course Name (Course Director/s)	Credit Hours	**Class Size**				**Instructional Formats**								
		31-165 students	19-30 students	11-18 students	10 or< students	Lecture	Discuss	Lab	Dissect	Clinical	CAI	Other	Assmt	**Total**
Neurosciences (Mann, Bouldin, Wright, Shores, Bashford) ⑩	5.0	80.5	6.0			77.0		6.0					3.5	**86.5**
Pathophysiology of Heart Disease (Willis, Smith,) ⑩ :	3.0	9.0			37.0	7.0	31.5						7.5	**46.0**
Pharmacology (Dudley)	3.0	61.0			10.5	55.0	10.5						6.0	**71.5**
Reproductive Medicine/ Genetics (Connolly, Rao, Powell, Groben) ⑩	3.0	42.0	5.5		10.5	40.0	10.5	5.5					2.0	**58.0**
Respiratory System (Carson, Paradowski, Funkhouser, Parker) ⑩	3.0	34.5	1.5		11.5	32.5	11.5	1.5					2.0	**47.5**
Tools for Dx & Rx (Reisner, Sonis, Busby-Whitehead, Warshauer) ⑩	1.0	22.5		13.0		20.0	8.5	4.5					2.5	**35.5**
Urinary System (Hladik, Carson, Thomas, Maygarden) ⑩	3.0	22.0		24.0		20.0	24.0						2.0	**46.0**
Total credit & contact hours	**45.0**	**415.5**	**32.5**	**157.5**	**214.0**	**383.5**	**275.5**	**17.5**		**93.5**			**49.5 ****	**819.5**

Legend:	new course director(s)	change in course order	⑩ change in course format	includes methods of assessment other than written exams

** Total contact time does not include exams or other forms of assessment that do not appear on the class schedule (e.g., take-home exams, write-ups, clinical observation). For more information about forms of student assessment used in the second year, please refer to Table 1.6.

Table 1.3: **Third Year Course Formats**

Course Name (Course Director/s)	Credits	# of Weeks
Psychiatry Clerkship (Lindsey)	6	6
Surgery Clerkship (Baker)	8	8
Pediatrics Clerkship (Byerley)	8	8
Obstetrics & Gynecology (Connolly)	6	6
Family Medicine Clerkship (Axelbank)	6	6
Medicine Clerkship (Klipstein)	12	12
Fundamentals of Acute Care (Freid, Murphy, Mayer)	1	1
Total Required Weeks		**47**

Table 1.4: **Fourth Year Course Formats**

Course Name (Course Director/s)	Credits	# of Weeks
Acting Internship (Nuzum)	6	4
Electives Program (Hobgood)	18	12
Critical Care Selective (Rutherford, Yankaskas)	6	4
Neurosciences Selective (Hinn, Tawney)	6	4
Ambulatory Care Selective (Hoole)	6	4
Total Required Weeks		**28**

: new course director(s)
For more information about forms of student assessment used in the third and fourth years, please refer to Table 1.7.

Table 1.5**: First Year Course Student Assessment Methods**

Courses	Assessment Methods
Biochemistry	3 written exams (first exam 30%, second exam 36%, final exam 34%)
Cell Biology	2 written exams (midterm exam 33%, final exam 67%)
Histology	2 written exams (midterm exam 40%, final exam 60%)
Human Anatomy & Embryology	4 written exams with two components- a written component & a lab practical (50% each). exam 1 (20%); exams 2 & 3 (25% each); exam 4 (30%)
Immunology	2 written exams (47.5% each); small group performance (5%)
Introduction to Clinical Medicine 1	group participation & attendance (5%); community week work (15%); interview assessment (20%); physical exam assessment (20%); small group work (40%) Course is Pass/Fail.
Introduction to Pathology	1 written exam (65%); lab attendance, performance & quizzes (35%)
Medicine and Society	written component (personal illness narrative 10%, patient visit essay 20%, ethics essay 20%); oral component (overall attendance & participation 35%, patient visit oral presentation 5%, health care reform exercise 10%)
Microbiology	3 written exams (bacteriology exam 60%, combined parasitology & virology exams 40%)
Molecular Biology/Genetics	2 written exams (50% each)
Neurobiology	2 written exams (midterm exam 40%, final exam 60%)
Physiology	2 written exams (45% each); problem sets (10%)
Preclinical Informatics	4 session assignments (56%); web page (30%); attendance & participation (14%) Course is Pass/Fail.

Student Assessment Methods

Table 1.6**: Second Year Course Student Assessment Methods**

Courses	Assessment Methods
Clinical Medicine Cases	1 online take-home exam (30%); group product (20%); AIDS case (15%); peer review (10%); autopsy (25%)
Clinical Epidemiology	1 online take-home exam (40%); review paper (36%); seminar participation (24%)
Endocrinology/Nutrition	2 written exam (midterm 40%, final 60%)
Gastrointestinal System	1 written exam (100%)
Hematology/Oncology	1 written exam (100%)
Humanities & Social Science Selectives	varies by seminar (e.g., written work, small group participation, oral presentation)
Introduction to Clinical Medicine 2	oral & written presentations; 1 written midterm exam; observation of clinical performance; OSCE; active participation in small groups. Course is Pass/Fail.
Musculoskeletal System/Dermatology	1 written exam (78%); lab performance (11%); written lab practical exam (11%)
Neurosciences/Psychiatry	2 written exams (midterm 35%, final 65%)
Pathophysiology of Heart Disease	1 written exam (40%); individual (25%) & group (35%) Readiness Assurance Tests (online IRATs; written GRATs)
Pharmacology	7 written exams (total of 100%); small group participation (used in determining final grade)
Reproductive Medicine/Genetics	1 written exam (65%); online daily readiness assurance exercises (20%); collaborative cases (15%)
Respiratory System	1 written exam (100%)
Tools for Diagnosis & Therapy	1 written exam (100%)
Urinary System	1 written exam (100%)

Student Assessment Methods

Table 1.7**: Third & Fourth Year Course Student Assessment Methods**

Courses	Assessment Methods		Courses	Assessment Methods
Third Year Courses			Surgery Clerkship	Observation of clinical skills, knowledge & professional behaviors by residents & attendings (60%); tutorial evaluation/ small group participation (20%); NBME subtest exam (20%)
Family Medicine Clerkship	Observation of clinical skills, knowledge & professional behaviors by community preceptors (40%); 3 presentations (40%); in-house written exam (20%)			
Medicine Clerkship	Observation of clinical skills, knowledge & professional behaviors by residents, attendings & preceptors; clinical evaluation exercise; graded history & physical write-up; 1 written in-house examination; NBME subtest exam		Fundamentals of Acute Care	1 written take home exam; class participation; evaluation of simulator exercises
Ob/Gyn Clerkship	Observation of clinical skills, knowledge & professional behaviors by residents & attendings (60%); oral exam (15%); oral presentation (5%); NBME subtest exam (20%)		**Fourth Year Courses**	
			Acting Internship; Critical Care Selective; and Neurosciences Selective;	Observation of clinical skills, knowledge & professional behaviors by residents & attendings, e.g. physical exam; interviewing; counseling; diagnosis & management; patient evaluations; problem solving ability; interpersonal skills; professionalism & values
Pediatrics Clerkship	Observation of clinical skills, knowledge & professional behaviors by residents & attendings (60%); observation by site preceptors (15%); write-ups (5%); NBME subtest exam (20%)		Ambulatory Care Selective	ACS- Assessment of clinical skills by preceptor; assessment of health care skills & knowledge
Psychiatry Clerkship	Observation of clinical skills, knowledge & professional behaviors by residents & attendings (60%); oral exam- 30-minute interview with patient, then presentation (20%); NBME subtest exam (20%)		Electives Program	Varies with elective, but may include observation of general or specific clinical skills & knowledge by residents, attendings or preceptors in a variety of specific clinical settings; research, clinical, educational or community projects; lab or bench research; clinical or community fieldwork; written assignments or papers

Curriculum Initiatives

Fall 2003 Curriculum Initiatives

- A new block system, which includes the mechanisms of disease and pathophysiology courses, was implemented in the second year curriculum.

Spring 2004 Curriculum Initiatives

- Field testing of the AIMS Online Testing System was completed; the application was implemented for first year courses already using the AIMS System in Fall 2004.
- Team Based Learning (TBL) and peer evaluation was piloted in the Reproductive Medicine course in the second year curriculum.
- A capstone course, Clinical Medicine Cases, designed to be a bridge between the basic sciences and the clinical science, was implemented at the end of the second year curriculum.

Section II: Student Characteristics

Table 2.1: **Demographic Data on Age, Gender and Residency by Class**

Class	**Age at entry**		**Gender N (%)**		**Residency N (%)**	
	Mean	Min-Max	Male	Female	NC	Other
MS1: Graduating Class of 2007	24	21-46	77 (48)	83 (52)	140 (88)	20 (12)
MS2: Graduating Class of 2006	24	21-38	73 (45)	88 (55)	143 (89)	18 (11)
MS3: Graduating Class of 2005	25	22-47	74 (46)	86 (54)	140 (87)	20 (13)
MS4: Graduating Class of 2004	25	20-49	84 (52)	76 (48)	133 (83)	27 (17)

Table 2.2: **Demographic Data on Race by Class**

Class	Race(s) Selected by Students *																				
	Black or African American	Native Hawaiian	American Indian or Alaskan Native	Chinese	Asian Indian	Filipino	Guamanian or Chamarro	Japanese	Korean	Pakistani	Vietnamese	Samoan	Other Pacific Islander	Other Asian	Mexican, Mexican American, Chicano or Chicana	Puerto Rican	Other Hispanic	Cuban	Other Race	White	No Response
MSI: Graduating Class of 2007	21			3	11			1	2	1				2			1		4	121	
MS2: Graduating Class of 2006	17	2	7	2	12	1			3											114	
MS3: Graduating Class of 2005	21		2	3	9	1			3		2						1			116	
MS4: Graduating Class of 2004	22		2	7	7	1			3		1						2			111	2

* NOTE: Starting with the entering class of 2003, the Association of American Medical Colleges (AAMC) changed the racial designations from a single to a multi-racial category. The categories in this table are those selected by students.

Table 2.3: **Undergraduate GPA and MCAT Data by Class**

Class	Undergraduate GPA						MCAT							
	Bio/Chem Phys/Math		All Other		Total		Biological Science		Physical Science		Verbal Reasoning		Total	
	Mean	Min-Max	Mean	Min-Max	Mean	Min-Max	Mean	Min-Max	Mean	Min-Max	Mean	Min-Max	Mean	Min-Max
MS1 Graduating Class of 2007	3.58	2.58-4.00	3.70	2.77-4.00	3.64	2.66-4.00	10.58	7-15	10.49	6-15	10.23	6-13	31.30	23-41
MS2 Graduating Class of 2006	3.56	2.26-4.00	3.66	2.46-4.00	3.61	2.64-4.00	10.32	6-13	10.43	6-14	10.17	6-13	30.88	21-39
MS3 Graduating Class of 2005	3.53	2.69-4.00	3.64	2.52-4.00	3.58	2.62-4.00	10.41	6-14	10.35	5-15	10.13	5-13	30.89	20-39
MS4 Graduating Class of 2004	3.52	2.33-4.00	3.62	2.26-4.00	3.56	2.70-4.00	10.39	6-14	10.14	5-15	10.01	5-13	30.54	17-41

Section III: Student Performance

Table 3.1: **First Year Course Grades and Scores**

Course Name		**Grades** (% of students achieving each grade)					**Scores** (100 point scale)		
	Course #	H	P	F	W *	CO **	Mean [SD]	Median	Min – Max ***
Biochemistry	MEDI 120	14.63	83.54	0.61	1.22	0.00	86.02 [6.12]	86.48	64.91 – 97.03
Cell Biology	MEDI 121	19.25	80.75	0.00	0.00	0.62	88.56 [6.41]	90.28	59.72 – 98.61
Histology	MEDI 122	8.86	89.87	0.63	0.63	0.00	85.75 [6.44]	86.33	67.67 – 96.42
Human Anatomy/ Embryology	MEDI 125	11.73	85.19	1.23	1.85	3.70	81.27 [6.10]	80.92	63.95 – 93.70
Immunology	MEDI 123	15.53	80.75	2.48	1.24	0.00	84.02 [7.08]	84.54	53.41 – 95.30
Introduction to Clinical Medicine 1 (P/F)	MEDI 136AB	N/A	99.37	0.00	0.63	0.00	N/A	N/A	N/A
Introduction to Pathology	MEDI 133	48.39	51.61	0.00	0.00	0.00	95.54 [3.26]	95.66	83.25 – 100.00
Medicine and Society	MEDI 127AB	18.35	81.01	0.00	0.63	0.00	91.69 [3.78]	92.00	80.00 – 98.00
Microbiology	MEDI 128	15.85	79.27	2.44	1.83	0.00	81.94 [5.98]	81.98	66.73 – 93.39
Molecular Biology/Genetics	MEDI 135	14.20	80.86	4.32	0.62	0.00	82.68 [6.40]	82.50	65.00 – 96.25
Neurobiology	MEDI 129	18.83	80.52	0.00	0.65	1.30	89.76 [5.50]	90.78	73.71 – 99.31
Physiology	MEDI 130	43.40	54.72	0.00	1.89	0.00	87.89 [6.96]	88.58	67.43 – 99.39
Preclinical Informatics (P/F)	MEDI 134	N/A	100.00	0.00	0.00	0.00	N/A	N/A	N/A

* withdrawn from a course
** All Condition grades (CO) are temporary grades and eventually converted to a final grade of CO/P or CO/F. Therefore students receiving Condition/Pass or Condition/Fail grades are included in the percentages for the Pass and Fail categories. All Condition grades have now been converted to a final grade.
*** minimum and maximum scores are based on the first exam attempt, and do not include scores on exams that have been re-taken.

Table 3.2: **Second Year Course Grades and Scores**

Course Name		**Grades** (% of students achieving each grade)					**Scores** (100 point scale)		
	Course #	H	P	F	W *	CO **	Mean [SD]	Median	Min – Max ***
Clinical Epidemiology	MEDI 220	17.83	81.53	0.00	0.64	0.00	90.05 [4.68]	90.00	77.00 – 99.00
Endocrinology/Nutrition	MEDI 243	26.71	72.67	0.00	0.62	0.00	86.83 [6.13]	88.00	72.00 - 100.00
Gastrointestinal System	MEDI 239	20.99	75.31	3.09	0.62	0.62	78.82 [9.31]	80.00	50.00 – 98.00
Hematology/Oncology	MEDI 234	23.46	75.93	0.62	0.00	2.47	85.87 [7.96]	87.23	59.57 – 100.00
Humanities & Soc. Sci. Selectives	MEDI 231	24.84	75.16	0.00	0.00	0.00	92.04 [4.10]	92.00	80.00 – 98.00
Intro Clinical Medicine 2 (P/F)	MEDI 236AB	N/A	99.37	0.00	0.63	0.00	N/A	N/A	N/A
Musculoskeletal System/Derm	MEDI 245	18.87	79.25	1.26	0.63	0.00	79.57 [6.18]	79.60	62.06 – 92.64
Neurosciences/ Psychiatry	MEDI 242	18.01	81.37	0.00	0.62	0.62	78.29 [6.54]	78.03	57.88 – 93.32
Pathophys of Heart Disease	MEDI 237	22.36	77.64	0.00	0.00	0.00	90.01 [3.71]	90.78	79.21 – 97.70
Pharmacology	MEDI 223AB	15.09	83.65	0.63	0.63	0.00	82.09 [5.95]	82.30	69.02 – 96.80
Reproductive Medicine/Genetics	MEDI 244	18.24	81.76	0.00	0.00	2.52	88.26 [4.37]	88.28	74.99 – 98.36
Respiratory System	MEDI 238	21.60	77.16	0.62	0.62	3.09	82.45 [7.96]	82.35	56.86 – 98.04
Tools for Dx & Rx	MEDI 230	19.63	80.37	0.00	0.00	3.68	88.97 [7.16]	91.25	62.50 -100.00
Urinary System	MEDI 240	16.05	83.33	0.00	0.62	0.00	88.84 [6.27]	89.80	69.39 – 100.00
Clinical Medicine Cases (P/F)	MEDI 246	N/A	99.38	0.00	0.62	0.00	N/A	N/A	N/A

* withdrawn from a course

** All Condition grades (CO) are temporary grades and eventually converted to a final grade of CO/P or CO/F. Therefore students receiving Condition/Pass or Condition/Fail grades are included in the percentages for the Pass and Fail categories. All Condition grades have now been converted to a final grade.

*** minimum and maximum scores are based on the first exam attempt, and do not include scores on exams that have been re-taken.

Table 3.3: **Third Year Course Grades**

Course Name		**Grades** (% of students achieving each grade)					
	Course No.	H	HP	P	F	W *	CO **
Psychiatry Clerkship	PSYY 334	53.25	40.91	5.19	0.00	0.65	0.00
Surgery Clerkship	SURY 345	37.09	39.07	21.85	0.00	1.32	1.99
Pediatrics Clerkship	PEDS 333	35.90	50.00	14.10	0.00	0.00	2.56
Obstetrics & Gynecology Clerkship	OBGN 332	30.92	55.92	11.84	0.00	1.32	0.00
Family Medicine Clerkship	FMME 340	32.69	52.56	14.74	0.00	0.00	0.00
Medicine Clerkship	MEDI 331	45.16	32.26	21.94	0.00	0.65	0.00
Fundamentals of Acute Care	LSSM 303	15.48	58.71	25.16	0.00	0.65	0.00

Table 3.4: **Fourth Year Course Grades**

Course Name		**Grades** (% of students achieving each grade)					
	Course No.	H	HP	P	F	W *	CO **
Acting Internship	AHEC 401-440	57.05	36.54	5.77	0.00	0.64	0.00
Ambulatory Care Selective	ASCM 401-408	45.19	49.63	4.44	0.00	0.74	0.00
Critical Care Selective	SURS 401-470	61.84	28.95	7.89	0.66	0.66	0.00
Neurosciences Selective	NEUS 401-408	63.20	33.60	3.20	0.00	0.00	0.00

* withdrawn from a course

** All Condition grades (CO) are temporary grades and eventually converted to a final grade of CO/P or CO/F. Therefore students receiving Condition/Pass or Condition/Fail grades are included in the percentages for the Pass and Fail categories. At the time of this report, all third year Condition grades have been converted to a final grade of CO/P. The failing grade in the Critical Care Selective has not been resolved at this date.

Table 3.5: **Clinical Performance Exam Scores (CPX)**

August-October 2003 (Graduating Class of 2004) N=155

	N (%)
Pass	146 (94.19%)
Fail *	9 (5.81%)

* nine students were re-examined and passed the CPX prior to their graduation

Skill Area Scores	**Overall Mean [SD]** N=155	**Passing Mean [SD]** N=146	**Range of Scores**	**Failing Mean [SD]** N=9	**Range of Scores**
Communication	76.77 [5.33]	76.90 [5.40]	62.76-88.75	74.62 [3.62]	68.84-80.24
Relationship	78.90 [5.40]	79.21 [5.35]	61.67-94.44	73.88 [3.55]	68.33-79.39
History Taking	66.22 [5.05]	66.42 [5.06]	51.73-77.43	62.86 [3.68]	57.43-69.75
Physical Exam	61.24 [11.99]	61.77 [11.85]	26.32-90.48	52.57 [11.39]	31.10-68.36
Assessment/Management	43.40 [7.00]	43.80 [6.93]	27.39-58.17	36.92 [4.76]	27.93-44.71

Table 3.6: **USMLE STEP 1 Performance**
(Graduating Class of 2006; Calendar Year 2004 *)

	First Attempt Examinees from UNC N= 159 N (%)	**All First Attempt Examinees from USA and Canada** N= 17,816 (includes UNC) N (%)
Pass	152 (96%)	16,335 (92%)
Fail **	7 (4%)	1,481 (8%)

	Mean [SD]	**Mean [SD]**
Total Test	219 (21)	216 (24)

NOTE: The minimum passing score for the Step 1 administration was 182.
* Data for the Step 1 exam is reported by the National Board for a calendar year.
** Five of the seven students who received a failing grade during this period have not yet passed the exam.

USMLE PERFORMANCE

Table 3.7: **USMLE STEP 2 Performance**

(Graduating Class of 2004; Academic Year 2003-04 *)

	First Attempt Examinees from UNC N= 153 N (%)	**All First Attempt Examinees from USA and Canada** N= 16,839 (includes UNC) N (%)
Pass	152 (99%)	15,761 (94%)
Fail **	1 (1%)	1,078 (6%)

	Mean [SD]	**Mean [SD]**
Total Test	224 [22]	218 [23]

Note: The minimum passing score for the Step 2 administration was 182.
* Data on the Step 2 exam is reported by the National Board for an academic year.
** The student who received a failing grade during this period has not yet passed the exam.

Performance in Content Categories: The mean and standard deviation for each content area are no longer provided. UNC students scored at or above the national mean in twenty-one content categories. UNC students scored below the national mean in Diseases of the Nervous System & Special Senses.

The content areas include: Preventive Medicine & Health Maintenance; Understanding Mechanisms of Disease; Diagnosis; Principles of Management; Normal Growth & Development, Principles of Care; Immunologic Disorders; Diseases of Blood & Blood Forming Organs; Mental Disorders; Diseases of the Nervous System & Special Senses; Cardiovascular Disorders; Diseases of the Respiratory System; Nutritional & Digestive Disorders; Gynecologic Disorders; Renal, Urinary, Male Reproductive Systems; Disorders of Pregnancy, Childbirth & Puerperium; Musculoskeletal, Skin & Connective Tissue Diseases; Endocrine & Metabolic Disorders; Medicine; Obstetrics & Gynecology; Pediatrics; Psychiatry; and Surgery.

Table 3.8 **Year-end Grades by Class**

	Number Receiving Honors (%)
MS1: Graduating Class of 2007	24 (14.46)
MS2: Graduating Class of 2006	24 (14.29)
MS3: Graduating Class of 2005	36 (24.32)
MS4: Graduating Class of 2004	47 (31.13)

Table 3.9: **Honor Degrees Awarded at Graduation**

Class of 2004

Type of Honor	**Honors Criteria**	**Number Received**
Doctor of Medicine with Distinction	year-end grade of Honors for each of the four years of medical school	7
Doctor of Medicine with Highest Honors	completion of the Distinguished Medical Scholars Program with excellence	4

Section IV: Student Perspectives

Table 4.1: **First Year Courses**

Mean Ratings and [Standard Deviations]	Biochemistry	Cell Biology	Histology	Human Anatomy & Embryology	Immunology	Introduction to Clinical Medicine I	Introduction to Pathology
Scale: 1=Not at all, 2=Slightly, 3=Somewhat, 4=Mostly, 5=Completely	N=120	N=117	N=111	N=119	N=118	N=82	N=99
Administrative aspects effective	4.2 [0.7]	4.6 [0.6]	3.8 [0.7]	3.6 [0.8]	3.6 [1.0]	4.1 [0.8]	3.7 [0.9]
Course learning objectives made clear	4.3 [0.6]	4.5 [0.6]	3.6 [0.9]	3.4 [1.0]	3.3 [1.0]	4.0 [0.7]	3.6 [1.0]
Course content related to course learning objectives	4.3 [0.6]	4.6 [0.5]	3.9 [0.7]	3.7 [0.9]	3.7 [0.8]	4.3 [0.6]	3.9 [0.9]
Exams related to course learning objectives	4.2 [0.6]	4.4 [0.8]	3.8 [0.8]	3.6 [0.8]	3.4 [0.9]	4.0 [0.8]	4.0 [0.9]
Paper materials were effective in helping achieve objectives	4.4 [0.7]	4.6 [0.5]	3.0 [1.2]	3.2 [1.1]	3.4 [1.0]	3.7 [0.9]	3.4 [1.1]
Electronic materials were effective in helping achieve objectives	4.5 [0.6]	4.3 [0.8]	3.6 [1.1]	3.9 [0.9]	3.6 [0.9]	4.0 [0.7]	4.0 [0.9]
Course texts were effective in helping achieve objectives	*	#	3.6 [1.0]	3.9 [0.9]	*	3.8 [0.9]	#
Large group/lectures were effective in helping achieve objectives	3.6 [0.8]	4.1 [0.8]	3.4 [0.9]	3.1 [0.9]	3.0 [0.8]	3.4 [0.9]	2.8 [1.0]
Small group/labs were effective in helping achieve objectives	3.4 [1.0]	3.5 [0.9]	3.7 [1.0]	3.7 [0.9]	3.4 [1.1]	4.2 [0.8]	3.3 [1.1]
Instructors accessible for questions or comments	4.3 [0.7]	4.7 [0.6]	4.0 [0.9]	3.9 [0.8]	4.1 [0.8]	4.6 [0.6]	4.0 [0.8]
Course content integrated within this course	4.1 [0.7]	3.6 [0.6]	3.7 [0.9]	3.6 [0.9]	3.6 [1.0]	4.1 [0.7]	3.8 [0.8]
Course content integrated with the content of other courses	3.6 [0.8]	3.6 [0.7]	3.5 [1.0]	2.9 [0.9]	3.0 [1.0]	3.6 [0.9]	3.3 [0.9]

Legend: # no required text in this course * over 50% of respondents indicated “Not Used,” “Not Applicable,” or did not answer this item

Table 4.1: **First Year Courses** (continued)

Mean Ratings and [Standard Deviations]	Medicine & Society	Microbiology	Molecular Biology & Genetics	Neurobiology	Physiology	Preclinical Informatics
Scale: 1=Not at all, 2=Slightly, 3=Somewhat, 4=Mostly, 5=Completely	N=108	N=100	N=119	N=108	N=102	N=135
Administrative aspects effective	3.9 [0.7]	3.3 [0.9]	3.7 [0.8]	4.6 [0.6]	4.5 [0.5]	3.5 [1.0]
Course learning objectives made clear	3.9 [0.7]	3.2 [0.9]	3.8 [0.8]	4.6 [0.5]	4.5 [0.6]	3.6 [0.9]
Course content related to course learning objectives	4.0 [0.7]	3.5 [0.9]	3.9 [0.7]	4.6 [0.6]	4.6 [0.6]	3.5 [1.0]
Exams related to course learning objectives	4.0 [0.7]	3.3 [0.9]	3.8 [0.7]	4.6 [0.5]	4.4 [0.6]	3.4 [1.0]
Paper materials were effective in helping achieve objectives	4.0 [0.8]	3.3 [1.0]	4.2 [0.9]	4.4 [0.7]	4.6 [0.6]	*
Electronic materials were effective in helping achieve objectives	3.6 [1.0]	3.4 [1.1]	4.1 [0.8]	4.6 [0.6]	4.5 [0.6]	3.7 [1.0]
Course texts were effective in helping achieve objectives	3.8 [0.8]	#	#	#	#	#
Large group/lectures were effective in helping achieve objectives	3.0 [0.9]	3.0 [1.0]	3.5 [0.9]	4.4 [0.6]	4.1 [0.7]	2.5 [1.1]
Small group/labs were effective in helping achieve objectives	4.1 [0.8]	3.3 [0.9]	3.5 [1.1]	4.4 [0.7]	4.2 [0.8]	2.8 [1.2]
Instructors accessible for questions or comments	4.5 [0.6]	3.8 [0.8]	3.9 [0.9]	4.8 [0.5]	4.5 [0.6]	3.9 [0.9]
Course content integrated within this course	3.8 [0.7]	3.2 [1.0]	3.7 [0.8]	4.4 [0.7]	4.9 [0.7]	3.3 [1.0]
Course content integrated with the content of other courses	2.8 [1.0]	2.9 [0.8]	3.4 [0.8]	3.8 [0.9]	3.8 [0.9]	3.4 [1.0]

Legend: # no required text in this course * over 50% of respondents indicated “Not Used,” “Not Applicable,” or did not answer this item

Table 4.2: **Second Year Courses**

Mean Ratings and [Standard Deviations]	Tools for Diagnosis & Therapy	Hematology/ Oncology	Pathophysiology of Heart Disease	Respiratory System	Gastrointestinal System	Urinary System
Scale: 1=Not at all, 2=Slightly, 3=Somewhat, 4=Mostly, 5=Completely	N=158	N=159	N=157	N=161	N=158	N=158
Administrative aspects effective	3.7 [0.9]	4.0 [0.7]	3.1 [1.2]	4.0 [0.8]	4.2 [0.7]	4.2 [0.7]
Course learning objectives made clear	3.7 [0.8]	3.9 [0.8]	3.1 [1.1]	3.9 [0.8]	4.0 [0.8]	4.1 [0.7]
Course content related to course learning objectives	3.9 [0.8]	4.1 [0.7]	3.5 [1.0]	4.1 [0.8]	4.2 [0.6]	4.2 [0.7]
Exams related to course learning objectives	4.0 [0.7]	3.9 [0.9]	3.2 [1.1]	3.9 [0.9]	4.0 [0.8]	4.2 [0.8]
Paper materials were effective in helping achieve objectives	3.8 [0.9]	4.2 [0.8]	2.8 [1.1]	2.2 [1.3]	4.0 [0.9]	4.0 [0.8]
Electronic materials were effective in helping achieve objectives	4.0 [0.8]	4.2 [0.8]	2.8 [1.1]	3.7 [1.2]	4.3 [0.8]	4.1 [0.7]
Course texts were effective in helping achieve objectives	3.5 [1.0]	#	4.3 [0.9]	4.2 [0.7]	#	#
Large group/lectures were effective in helping achieve objectives	3.7 [0.8]	3.9 [0.7]	2.7 [1.2]	3.9 [0.8]	3.7 [0.9]	3.9 [0.7]
Small group/labs were effective in helping achieve objectives	4.0 [0.9]	4.2 [0.9]	2.7 [1.2]	4.3 [0.8]	3.9 [0.9]	4.2 [0.8]
Instructors accessible for questions or comments	4.2 [0.7]	4.4 [0.6]	3.4 [1.2]	4.3 [0.7]	4.4 [0.7]	4.4 [0.7]
Course content integrated within this course	3.5 [1.0]	4.1 [0.7]	3.9 [1.1]	4.1 [0.9]	4.1 [0.8]	4.1 [0.8]
Course content integrated with the content of other courses	3.2 [1.2]	3.4 [0.9]	3.8 [1.0]	3.5 [1.0]	3.9 [0.8]	3.8 [1.0]

Legend: # no required text in this course * over 50% of respondents indicated “Not Used,” “Not Applicable,” or did not answer this item

Table 4.2: **Second Year Courses** (continued)

Mean Ratings and [Standard Deviations]	Neurosciences/ Psychiatry	Endocrinology/ Nutrition	Reproductive Medicine/ Genetics	Musculoskeletal/ Dermatology	Clinical Medicine Cases
Scale: 1=Not at all, 2=Slightly, 3=Somewhat, 4=Mostly, 5=Completely	N=157	N=153	N=155	N=155	N=157
Administrative aspects effective	2.4 [1.0]	4.2 [0.7]	3.9 [0.8]	4.0 [0.8]	3.0 [1.1]
Course learning objectives made clear	3.0 [0.9]	4.1 [0.8]	3.9 [0.7]	3.7 [1.0]	2.6 [1.2]
Course content related to course learning objectives	3.2 [0.9]	4.1 [0.7]	4.0 [0.7]	3.9 [0.9]	2.8 [1.2]
Exams related to course learning objectives	3.1 [0.9]	4.1 [0.8]	3.6 [0.8]	3.3 [1.1]	2.4 [1.2]
Paper materials were effective in helping achieve objectives	2.7 [1.0]	4.2 [0.8]	3.0 [1.3]	4.0 [0.9]	*
Electronic materials were effective in helping achieve objectives	2.9 [1.0]	4.2 [0.7]	3.9 [0.8]	3.9 [0.9]	3.2 [1.2]
Course texts were effective in helping achieve objectives	3.0 [1.3]	#	3.6 [1.0]	*	*
Large group/lectures were effective in helping achieve objectives	3.2 [0.9]	3.8 [0.7]	3.5 [1.0]	3.5 [0.9]	2.5 [1.1]
Small group/labs were effective in helping achieve objectives	3.5 [1.1]	4.4 [0.8]	3.9 [0.8]	4.4 [0.8]	3.2 [1.1]
Instructors accessible for questions or comments	3.6 [1.1]	4.2 [0.7]	4.2 [0.9]	4.3 [0.7]	3.9 [1.0]
Course content integrated within this course	2.4 [1.2]	4.1 [0.7]	3.9 [0.8]	3.9 [0.9]	3.2 [1.1]
Course content integrated with the content of other courses	3.2 [1.1]	3.6 [1.0]	3.4 [1.1]	3.4 [1.1]	3.2 [1.1]

Legend: # no required text in this course * over 50% of respondents indicated “Not Used,” “Not Applicable,” or did not answer this item

Table 4.2: **Second Year Courses** (continued)

Mean Ratings and [Standard Deviations]	Clinical Epidemiology	Humanities & Social Sciences	Introduction to Clinical Medicine II	Pharmacology
Scale: 1=Not at all, 2=Slightly, 3=Somewhat, 4=Mostly, 5=Completely	N=147	N=147	N=153	N=154
Administrative aspects effective	3.9 [0.8]	4.2 [0.7]	3.8 [0.9]	3.9 [0.8]
Course learning objectives made clear	3.9 [0.8]	4.1 [0.9]	3.8 [0.8]	3.8 [0.8]
Course content related to course learning objectives	4.0 [0.7]	4.1 [0.9]	3.9 [0.8]	3.9 [0.7]
Exams related to course learning objectives	3.8 [0.9]	4.2 [0.8]	3.8 [0.8]	3.7 [0.9]
Paper materials were effective in helping achieve objectives	4.0 [0.8]	4.1 [0.9]	3.4 [1.1]	4.2 [0.8]
Electronic materials were effective in helping achieve objectives	4.0 [0.8]	4.3 [0.8]	3.5 [1.0]	3.9 [0.8]
Course texts were effective in helping achieve objectives	3.7 [0.8]	*	#	#
Large group/lectures were effective in helping achieve objectives	*	*	2.7 [1.1]	3.2 [1.0]
Small group/labs were effective in helping achieve objectives	3.9 [0.8]	4.2 [0.9]	4.1 [0.8]	3.4 [1.0]
Instructors accessible for questions or comments	4.4 [0.7]	4.5 [0.7]	4.4 [0.8]	4.1 [0.8]
Course content integrated within this course	4.1 [0.7]	3.9 [1.1]	3.8 [0.8]	3.7 [0.9]
Course content integrated with the content of other courses	3.4 [0.9]	2.9 [1.3]	3.6 [0.8]	3.4 [1.0]

Legend: # no required text in this course * over 50% of respondents indicated “Not Used,” “Not Applicable,” or did not answer this item

Table 4.3: **Third-Year Clerkships**

Mean Ratings and [Standard Deviations] * *Scale: 1=Not al all, 2=Slightly, 3=Somewhat, 4=Mostly, 5=Completely*	Family Medicine	Internal Medicine	Obstetrics-Gynecology	Pediatrics	Psychiatry	Surgery
	N = 155	N = 153	N = 151	N = 155	N = 154	N = 148
Administrative aspects effective	4.2 [0.8]	4.4 [0.7]	4.2 [0.8]	4.6 [0.6]	4.4 [0.8]	4.2 [0.7]
Clerkship learning objectives made clear	4.1 [0.8]	4.4 [0.7]	4.1 [0.8]	4.4 [0.7]	4.4 [0.6]	3.5 [0.9]
Write-ups & presentations helped to achieve relevant learning objectives	3.5 [0.9]	4.1 [0.8]	4.0 [0.7]	4.2 [0.8]	4.3 [0.7]	3.3 [1.0]
Written exams (shelf exams) reflect stated learning objectives	3.7 [0.9]	3.8 [0.9]	3.6 [0.7]	3.6 [0.9]	3.6 [0.9]	2.8 [1.0]
Paper materials were effective in helping achieve objectives	3.9 [1.0]	3.9 [0.8]	3.7 [1.0]	4.1 [0.8]	3.7 [0.9]	2.8 [1.2]
Electronic materials were effective in helping achieve objectives	3.5 [1.2]	4.0 [0.8]	*	*	*	*
Clinical experiences contribute to achieving stated learning objectives	4.3 [0.7]	4.1 [0.8]	4.0 [0.8]	4.1 [0.9]	4.3 [0.6]	3.7 [0.9]
Conferences, seminars, etc. were effective in helping achieve clerkship learning objectives	3.6 [1.0]	3.9 [0.9]	3.9 [0.8]	3.9 [1.1]	4.1 [0.7]	3.5 [1.0]
Residents effective in information and clinical guidance	N/A	3.7 [1.3]	4.0 [1.0]	4.0 [1.1]	4.0 [1.0]	3.8 [1.1]
Residents effective in providing feedback	N/A	3.6 [1.3]	3.6 [1.1]	3.6 [1.3]	3.7 [1.1]	3.5 [1.2]
Attending physicians effective in information & clinical guidance	N/A	4.1 [0.9]	3.9 [1.0]	4.2 [0.8]	4.2 [1.0]	3.6 [1.1]
Attending physicians effective in providing feedback	N/A	3.9 [1.0]	3.4 [1.1]	4.0 [1.0]	4.1 [2.0]	3.1 [1.2]
Preceptors effective in information and clinical guidance	4.5 [0.7]	N/A	N/A	N/A	N/A	N/A
Preceptors effective in providing feedback	4.3 [0.9]	N/A	N/A	N/A	N/A	N/A

Legend: *over 50% responded “Not Used,” “Not Applicable,” or did not answer this item

Table 4.3: **Third-Year Clerkships** (continued)

Third Year Course: Fundamentals of Acute Care	Mean Ratings and [Standard Deviations]
Scale Used: 1=Not at all, 2=Slightly, 3=Somewhat, 4=Mostly, 5=Completely	N=152
Administrative aspects effective	4.6 [0.6]
Course learning objectives made clear	4.5 [0.6]
Course learning activities reflect stated learning objectives	4.5 [0.5]
Exams reflect stated learning objectives	4.2 [0.7]
Paper materials were effective in helping achieve objectives	4.1 [0.8]
Simulator sessions effective in helping achieve objectives	4.7 [0.5]
Course faculty effective in providing supervision	4.6 [0.5]

Table 4.4: **Fourth-Year Selectives**

Mean Ratings and [Standard Deviations]	Acting Internship	Ambulatory Care	Critical Care	Neurosciences
Scale Used: 1=Not at all, 2=Slightly, 3=Somewhat, 4=Mostly, 5=Completely	N=155	N=138	N=151	N=136
Administrative aspects effective	4.3 [0.8]	4.1 [1.0]	4.3 [0.8]	3.8 [0.9]
Course learning objectives/outcomes made clear	4.1 [0.9]	4.3 [0.8]	4.0 [0.9]	3.6 [0.9]
Course content related to course learning objectives	4.2 [0.8]	4.2 [0.9]	4.1 [0.9]	3.8 [0.8]
Assignments reflect stated course learning objectives/outcomes	4.3 [0.8]	3.9 [1.0]	3.9 [1.0]	3.6 [1.0]
Conferences, cases, seminars effective in helping achieve objectives/outcomes	4.3 [0.8]	3.8 [1.1]	4.0 [0.9]	3.9 [1.0]
Various clinical experiences contributed to achieving stated learning objectives/outcomes	4.5 [0.7]	4.4 [0.8]	4.4 [0.7]	3.9 [0.8]
Residents effect in providing information and clinical guidance	4.3 [1.0]	N/A	4.2 [0.9]	3.9 [1.0]
Residents effective in providing feedback	4.0 [1.1]	N/A	3.9 [1.1]	3.4 [1.1]
Attendings effective in providing information and clinical guidance	4.4 [0.8]	N/A	4.3 [0.7]	3.9 [0.9]
Attendings effective in providing feedback	4.0 [1.0]	N/A	3.9 [0.9]	3.3 [1.1]
Preceptors effective in providing information and clinical guidance	N/A	4.2 [1.0]	N/A	N/A
Preceptors effective in providing feedback	N/A	4.0 [1.1]	N/A	N/A

Table 4.5: **Fourth-Year Electives**

Mean Ratings and [Standard Deviations]	All Fourth Year Elective Courses
** Scale: 1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree*	N= 355
The learning objectives for this course were well defined.	4.0 [1.1]
The learning activities were effective in helping me achieve the learning objectives.	4.2 [1.0]
I received adequate supervision & guidance.	4.2 [1.0]
I received direct indication of my performance and/or progress, that reinforced or helped me to improve my knowledge & skills.	3.8 [1.1]
Faculty provided me with sufficient & appropriate supplemental references and/or encouraged me to read about individual patient problems.	4.2 [1.0]
This course helped me develop skills in analyzing clinical or research problems.	4.2 [1.0]
This course helped me develop judgment in addressing research or patient management issues.	4.2 [1.0]
I would recommend this course to other students.	4.4 [1.0]
The administrative aspects of this course were effective.	4.0 [1.2]

* The order of the rating scale for electives is the reverse of the scale used in other course evaluations; the scale will be made uniform in 2004-05.

Table 4.5: **Fourth-Year Electives** (continued)

Percent	All Fourth Year Elective Courses
	N= 355
My primary reason for choosing this elective was: (check one primary reason)	**Percent**
general interest (not career specific)	31.07
assistance in making a career choice decision	24.01
educational need related to career choice	31.92
educational need related to remediation of knowledge or skill deficit	3.95
peer recommendation	1.98
experience in a potential residency program	6.21
desire for a specific site	0.86

Mean Ratings and [Standard Deviations]	All Fourth Year Elective Courses
** Scale: 1=Strongly Disagree, 2=Disagree, 3=Neither Agree nor Disagree, 4=Agree, 5=Strongly Agree*	N= 355
Based on my reason for choosing this elective as indicated above, I found this course to be effective.	4.3 [1.0]

AAMC MATRICULATION QUESTIONNAIRE HIGHLIGHTS
Responses of Students Entering UNC SOM in 2003 (the class of 2007)

Table 4.6: **Factors in choosing a medical career**

Indicate how important the following factors were in your choice of medicine as a career goal: - The six highest rated responses listed below -		
Scale: 0=not at all important to 4=very important	Mean	N
Profession provides opportunity to make a difference in people's lives	3.9	160
Physicians can educate patients about health promotion disease prevention	3.6	160
Profession provides opportunity to exercise social responsibility	3.5	160
Profession can have continuing contact with their patients	3.4	160
Physicians use critical thinking in evaluating medical findings	3.3	160
Physicians can choose career decisions that allow significant autonomy	3.1	160

Table 4.7: **Factors in choice of medical school**

How important were the following factors in your choice of this particular medical school? - The six highest rated responses listed below -		
Scale: 0=not at all important to 4=very important	Mean	N
Financial considerations – costs of attending	3.6	160
General reputation of school	3.4	160
Geographic location	3.4	160
Ability of school to place students in particular residency programs	3.1	160
Community-based experience/ opportunity	3.0	160
Friendliness of administrators, faculty and/or students	3.0	160

Table 4.8: **General specialty**

What general specialty are you considering?	N=96*
	Percent
Primary Care (Obstetrics/Gynecology, Pediatrics, Family Practice, Internal Medicine)- *represents a decrease from 60.3% in 2002-03*	46.9
Non-Primary Care- *represents an increase from 39.7% in 2002-03*	53.1

* does not include students who were undecided

AAMC MATRICULATION QUESTIONNAIRE HIGHLIGHTS
Responses of Students Entering UNC SOM in 2003 (the class of 2007)

Table 4.9: **Career intentions**

Indicate your career intentions from the different career activities:	N=160
Subtotals for career activity areas	*Percent*
Full-time academic faculty	17.5
Non-University research scientist	1.3
Full-time (non-academic) clinical practice	49.4
Other	6.3
Undecided	25.6

Table 4.10: **NC residency**

Do you plan to practice in NC after completing your residency/fellowship training?	N=160
	Percent
Yes	51.3

Table 4.11: **Underserved practice**

Do you plan to locate your practice in an underserved area?	N=160
	Percent
Yes (*represents a decrease from 28.1% in 2002-03*)	19.4
No	13.1
Undecided (*represents an increase from 58.8% in 2002-03*)	67.5

Table 4.12**: Basic science courses**

Based on your experiences, indicate whether you agree or disagree with the following statement about medical school:			N=103
	Strongly Agree/ Agree (%)	No Opinion (%)	Disagree/ Strongly Disagree (%)
Basic science content objectives were made clear to students	83.5	10.7	5.8
Basic science content was sufficiently integrated/ coordinated	63.1	15.5	21.4
Basic science content objectives and examination content matched closely	66.0	15.5	18.5
Basic science content had sufficient illustrations of clinical relevance	53.4	13.6	33.0
Basic science content was well organized	64.1	19.4	16.5
Basic science content provided relevant preparation for clerkships	58.2	21.4	20.3

Table 4.13: **Basic sciences as preparation for clinical education**

Indicate how well you think that instruction in the following sciences basic to medicine prepared you for clinical clerkships and electives:					
Scale: 1=excellent to 4=poor	Mean	N		Mean	N
Biochemistry	2.8	102	Microanatomy/Histology	2.5	101
Biostatistics and epidemiology	1.9	103	Microbiology	2.0	102
Genetics	2.1	102	Neuroscience	2.0	102
Gross Anatomy	1.8	102	Pathology	2.1	102
Immunology	2.2	102	Pharmacology	1.7	102
ICM/Introduction to the Patient	1.8	102	Physiology	1.4	102

AAMC GRADUATION QUESTIONNAIRE HIGHLIGHTS
Responses of Graduating Students (class of 2004)

Table 4.14: **Clerkship quality**

Rate the quality of your educational experiences in the following clinical clerkships:					
Scale: 1=excellent to 4=poor	Mean	N		Mean	N
Family/community medicine	1.9	103	Pediatrics	1.5	103
Internal medicine	1.6	103	Psychiatry	1.5	102
Neurology	2.5	95	Surgery	1.9	103
Obstetrics/Gynecology	2.2	103			

Table 4.15: **Clinical education**

Indicate whether you agree or disagree with the following statements about clinical education at your medical school: N=103						
Means *Scale: 1=strongly agree to 5=strongly disagree*	Family Medicine	Internal Medicine	Obstetrics & Gynecology	Pediatrics	Psychiatry	Surgery
Learning objectives were made clear	1.9	1.6	2.2	1.7	1.8	2.2
Performance was assessed against learning objectives	2.2	1.8	2.5	1.8	1.8	2.3
Had sufficient opportunities to follow a variety of patients	1.7	1.4	1.9	1.6	1.7	1.7
Attending faculty were adequately involved in teaching	1.7	1.7	2.3	1.5	1.6	2.2
Faculty member personally observed me performing physical examinations	2.0	1.7	3.1	2.3	1.6	3.4
Faculty members provided sufficient feedback about my performance	2.0	2.0	3.0	1.9	1.7	2.8
Clerkship included adequate geriatric/gerontology subject matter	1.9	1.8	3.2	NA	2.0	2.8
Time on the wards (or ambulatory care setting) was productive	1.9	1.7	2.3	1.7	2.0	2.1
Residents and fellows provided effective teaching	2.8	1.5	2.3	1.7	2.0	2.0
Overall, teaching received by residents & fellows enhanced educational experience	2.7	1.6	2.3	1.6	2.1	2.0

Table 4.16: **Instruction time**

Do you believe that the time devoted to your instruction in the following areas was inadequate, appropriate, or excessive: ? N=102			
	Inadequate	Appropriate	Excessive
Clinical Decision-making & Clinical Care	*Percent*	*Percent*	*Percent*
Care of hospitalized patients	2.0	95.1	2.9
Care of ambulatory patients	2.9	88.2	8.8
Patient follow-up	36.3	62.7	1.0
Primary care	1.0	89.2	9.8
Long-term health care	30.4	69.6	0.0
Patient interviewing skills	0.0	87.3	12.7
Diagnosis of disease	2.9	94.1	2.9
Management of disease	4.9	94.1	1.0
Teamwork with other health professionals	15.7	82.4	2.0
Clinical pharmacology	14.7	84.3	1.0
Nutrition	47.1	48.0	4.9
Geriatrics	28.7	68.3	3.0
Pain management	58.8	41.2	0.0
Continuity of care	25.5	74.5	0.0
Problem solving	4.9	93.1	2.0
Clinical reasoning	2.0	96.1	2.0
Ethical decision making	15.7	79.4	4.9

AAMC GRADUATION QUESTIONNAIRE HIGHLIGHTS
Responses of Graduating Students (class of 2004)

Table 4.16: **Instruction time** (continued)

Do you believe that the time devoted to your instruction in the following areas was inadequate, appropriate, or excessive: ? N=102			
	Inadequate	Appropriate	Excessive
Evidence Based Medicine	*Percent*	*Percent*	*Percent*
Evidence-based medicine in general	2.0	89.2	8.8
Interpretation of clinical data and research reports	6.9	86.3	6.9
Literature reviews/critiques	4.9	89.2	5.9
Interpretation of laboratory results	8.8	87.3	3.9
Decision analysis	10.8	86.3	2.9
Population Based Medicine			
Public health and community medicine	16.7	78.4	4.9
Role of community health and social service agencies	33.3	63.7	2.9
Health promotion and disease prevention	8.8	88.2	2.9
Screening for diseases	5.9	91.2	2.9
Infectious disease prevention	3.9	92.2	3.9
Clinical epidemiology	1.0	83.3	15.7
Biostatistics	23.5	68.6	7.8
Women's health	21.6	72.5	5.9
Health issues for underserved populations	26.5	69.6	3.9
Risk assessment and counseling	15.7	82.4	2.0
Occupational medicine	50.0	49.0	1.0
Cultural differences and health related behaviors/customs	33.3	65.7	1.0
Culturally appropriate care for diverse populations	33.3	65.7	1.0

Table 4.16: **Instruction time** (continued)

Do you believe that the time devoted to your instruction in the following areas was inadequate, appropriate, or excessive: ? N=102			
	Inadequate	Appropriate	Excessive
Practice of Medicine	*Percent*	*Percent*	*Percent*
Cost effective medical practice	52.0	48.0	0.0
Quality assurance in medicine	46.1	53.9	0.0
Practice management	63.7	36.3	0.0
Medical record-keeping	46.1	50.0	3.9
Managed care	51.0	49.0	0.0
Patient privacy/HIPAA [NEW]	18.6	68.6	12.7
Health care systems [NEW]	48.0	52.0	0.0
Medical Economics [NEW]	64.7	34.3	1.0
Other Medical Topics			
Law and medicine	65.7	33.3	1.0
Behavioral sciences	7.8	90.2	2.0
Medical genetics	1.0	96.1	2.9
Genetics counseling	17.6	80.4	2.0
Taking genetic family history	7.8	89.2	2.9
Genetic testing	12.7	85.3	2.0
Pharmacogenetics	42.2	56.9	1.0
Complementary & alternative medicine	38.2	60.8	1.0

Table 4.16: **Instruction time** (continued)

Do you believe that the time devoted to your instruction in the following areas was inadequate, appropriate, or excessive: ? N=102			
	Inadequate	Appropriate	Excessive
Other Medical Topics (continued)	*Percent*	*Percent*	*Percent*
Human sexuality	19.6	79.4	1.0
Family dynamics	21.6	72.5	5.9
End of life care	46.1	53.9	0.0
Family/domestic violence	22.5	76.5	1.0
Drug and alcohol abuse	9.8	87.3	2.9
Biomedical ethics [NEW]	25.5	72.5	2.0
Professionalism [NEW]	10.8	87.3	2.0
Cultural Competence [NEW]	21.6	76.5	2.0

Table 4.17: **Career intentions**

Indicate your career intention from the different activities listed below:	N=102 *Percent*
Full-time university faculty (basic sciences teaching/research)	1.0
Full-time university faculty (clinical teaching/research)	38.2
Full-time clinical practice: solo practice	1.0
Full-time clinical practice: in partnership with one physician	3.9
Full-time clinical practice: in a group or 3 or more	25.5
Full-time clinical practice: join a closed panel HMO	0.0
Full-time clinical practice: salaried, hospital	5.9
Other	4.0
Undecided	20.6

Table 4.18: **Underserved practice**

Do you plan to locate your practice in an underserved area?	N=102 *Percent*
Yes (*represents a decrease from 22.0% in 2002-03*)	15.7
No	34.3
Undecided (*represents an increase from 36.4% in 2002-03*)	50.0

INFLUENCES ON CAREER CHOICE
Responses of Graduating Students (class of 2004)

Table 4.19: **Factors reported by graduating seniors as influencing specialty choice**

Factors	Percent		
	Extremely/ Very Important	Important	Slightly/ Not Important
Role models (e.g., faculty, preceptor, personal physician, mentor) N=136	69.86	22.06	8.09
Practice environment (e.g., lifestyle in that specialty) N=135	68.89	21.48	9.63
Curricular experiences (e.g. courses taken) N=136	69.12	19.12	11.76
Personal (e.g., family, health reasons) N=136	55.15	20.59	24.26
Extracurricular experiences N=135	44.45	25.93	29.63
Financial considerations (e.g., indebtedness, income) N=136	16.18	29.41	54.41
Academic performance (e.g., grades, honors project) N=136	23.53	25.74	50.74

Table 4.20: **Medical school influences on primary care choice, reported by graduating seniors**

(% respondents indicating that the listed experience or characteristic *influenced for primary care, against primary care, or had no effect)*

Medical School Experiences and Characteristics	For primary care	Against primary care	No effect
ICM community weeks (N = 135)	42.96	24.44	32.59
ICM on-campus activities (N = 135)	25.93	20.00	54.07
Family Medicine clerkship (N = 136)	51.47	36.03	12.50
Internal Medicine clerkship (N = 136)	38.97	31.62	29.41
Ob/Gyn clerkship (N = 135)	27.41	37.04	35.56
Pediatrics clerkship (N = 136)	45.59	25.00	29.41
Psychiatry clerkship (N = 134)	18.66	20.15	61.19
Surgery clerkship (N = 135)	20.00	34.07	45.93
Other courses (N = 40)	15.00	15.00	70.00
Administrative encouragement of primary care (N = 130)	18.46	7.69	73.85
Faculty attitudes (N = 133)	21.80	19.55	58.65

INFLUENCES ON CAREER CHOICE
Responses of Graduating Students (class of 2004)

Table 4.21: **Percent of graduating students in defined subgroups rating factors**
as *very important or extremely important influences* on career choice.

Factors	Pri-Pri N = 45	Pri-Spec N = 39	Spec-Pri N = 10	Spec-Spec N = 38
Role models	77.78	61.54	60.00	71.06
Practice environment	65.91	76.93	50.00	65.79
Curricular experiences	68.88	66.67	60.00	71.06
Personal	53.34	48.72	60.00	63.16
Extracurricular experiences	54.54	28.21	30.00	52.64
Financial considerations	4.44	15.39	10.00	34.21
Academic performance	15.55	17.94	10.00	36.84

Table 4.22: **Percent of students in defined subgroups rating curricular experiences**
as *positively influencing* choice of a primary care career.

Medical School Experiences and Characteristics	Pri-Pri N = 45	Pri-Spec N = 39	Spec-Pri N = 10	Spec-Spec N = 38
ICM community weeks	53.33	47.37	40.00	23.68
ICM on-campus activities	31.11	34.21	20.00	10.53
Family Medicine clerkship	66.67	43.59	50.00	42.11
Internal Medicine clerkship	57.78	28.21	40.00	28.95
Ob/Gyn clerkship	35.56	23.08	11.11	26.32
Pediatrics clerkship	73.33	28.21	90.00	18.42
Psychiatry clerkship	34.09	10.26	30.00	5.26
Surgery clerkship	43.18	12.82	30.00	0.00
Other courses	25.00	16.67	25.00	0.00
Administrative encouragement of primary care	23.26	28.95	11.11	5.56
Faculty attitudes	26.67	23.68	44.44	8.11

Subgroups:
Pri-Pri (students began and ended with primary care choice)
Pri-Spec (students began with primary care and ended with subspecialty)
Spec-Pri (began with subspecialty and ended with primary care)
Spec-Spec (began and ended with subspecialty)

RESIDENCY PLACEMENTS
Graduating Students (class of 2004)

Table 4.23: **Residency match results**

Primary Care Specialties	Number placed N= 148*
Family Practice	23
Medicine	31
Medicine - Pediatrics	1
Medicine - Preliminary	
Obstetrics/Gynecology	8
Pediatrics	18
Primary Care Total (54.7%)	**81**
Non-Primary Care Specialties	Number placed
Anesthesiology	13
Dermatology	3
Emergency Medicine	13
Medical Genetics	
Neurology	1
Neurosurgery	
Ophthalmology	3
Orthopedic Surgery	6
Otolaryngology	3
Pathology	2
Physical Medicine & Rehabilitation	4
Plastic & Reconstructive Surgery	
Psychiatry	9
Psychiatry – Preliminary	
Radiology – Diagnostic	2
Radiology – Oncologic	
Surgery – General	7
Surgery – Preliminary	
Transitional	
Urology	1
Non Primary Care Total (45.3%)	**67**
** 5 Students deferred (3.3% of graduating class of 153)*	**148**