

SCS Graduate Program Curricula 2008-09

The following program requirements apply to SCS graduate students that begin their program in the 2008-09 academic year. If you defer starting the program, be aware that you are bound to the curriculum requirements in effect in the quarter you start taking courses, not the quarter you are admitted. While we will make every reasonable effort to accommodate students whose programs change, this is not always possible. Northwestern University reserves the right to modify or discontinue any program without notice.

Click on the links below to review the curriculum for your program.

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Clinical Research and Regulatory Administration Graduate Certificate Requirements

Courses	Units
<i>Core Courses</i>	3
CLIN_RES 400 Essentials of Initiating Clinical Research	
CLIN_RES 401 Responsible Conduct of Research	
MSCI 303 ¹ Drug and Device Development	
Electives (choose one of the below)	1
CLIN_RES 403 Clinical Research Design and Methodology (Clinical Trials Conduct specialization)	
CLIN_RES 400 Regulatory Support and Administration (Regulatory Administration specialization)	
<i>Total required units:</i>	4

¹ This class now has the course code of CLIN_RES 402.

Computer Information Systems Master of Science Degree Requirements

Courses	Units
<i>Core Courses</i>	6
CIS 313 Telecommunications & Computer Networks	
CIS 314 Object-Oriented Programming ¹	
CIS 315 Advanced Object-Oriented Programming ²	
CIS 317 Introduction to Databases	
CIS 350 Strategic Information Systems	
CIS 394 Software Project Management & Development	
Electives (choose any 3 electives <u>or</u> 3 courses in an optional area of specialization)	3
<i>Database & Internet Technologies</i>	
<i>Information Systems Security</i>	
<i>Software Development & Project Management</i>	
Other Required Courses	2
LEADERS 481 Foundations of Leadership	
<i>One of the following</i>	
CIS 498 Computer Information Systems Project - <i>or</i> -	
CIS 590 Capstone Project	
Total required units:	11

¹ Students who completed CIS 212-CN 'Introduction to Object Oriented Programming' but not CIS 314 'Intermediate Object-Oriented Programming' prior to Fall 2008 may substitute an elective in place of the requirement to take CIS 314.

² Students who completed CIS 314 'Intermediate Object-Oriented Programming' but not CIS 315, 'Advanced Object Oriented Programming' prior to Fall 2008 may substitute an elective in place of the requirement to take CIS 315.

Professional Graduate Series Certificates

Please note: overlapping courses may count toward one PGS only

Database and Internet Technologies	Units
<i>Core Courses</i>	
CIS 314 Intermediate Object-Oriented Programming	1
CIS 317 Introduction to Databases	1
CIS 419 Web Application Development	1
and one of the following:	
CIS 431 Database Administration	1
CIS 435 Introduction to Data Warehousing and Data Mining	1
<i>Total required units:</i>	4

Information Systems Security	Units
<i>Core Courses</i>	
CIS 313 Telecommunications & Computer Networks	1
CIS 452 Fundamentals of Network Security	1
CIS 455 Business Continuity & Disaster Recovery	1
Information Security	1
<i>Total required units:</i>	4

Software Project Management and Development	Units
<i>Core Courses</i>	
CIS 314 Intermediate Object-Oriented Programming	1
CIS 315 Advanced Object-Oriented Programming	1
CIS 316 Object-Oriented Analysis and Design	1
CIS 394 Software Project Management and Development	1
and one of the following:	
CIS 483 Software Testing and Quality Assurance	1
CIS 485 Software Systems Architecture	1
<i>Total required units:</i>	5

Creative Writing (MA)
Master of Arts Degree Requirements

Courses	Units
<i>Fiction Concentration</i>	
MCW 413 Studies in Fiction Writing	3
MCW 479 Poetry for Prose Writers	1
Five electives: may include internships, seminars, or independent studies (maximum of 2 independent studies and 1 internship); at least two electives must be literature classes, either MCW 490s and/or MALit courses.	5
MCW 590 Thesis Research	1
<i>Creative Nonfiction Concentration</i>	
MCW 461 Studies in Writing Creative Nonfiction	3
MCW 479 Poetry for Prose Writers	1
Five electives: may include internships, seminars, or independent studies (maximum of 2 independent studies and 1 internship); at least two electives must be literature classes, either MCW 490s and/or MALit courses.	5
MCW 590 Thesis Research	1
<i>Poetry Concentration</i>	
MCW 411 Studies in Writing Poetry	3
MCW 480 The Elements of Prose Genres for Poets	1
Five electives: may include internships, seminars, or independent studies (maximum of 2 independent studies and 1 internship); at least two electives must be literature classes, either MCW 490s and/or MALit courses.	5
MCW 590 Thesis Research	1
<i>Total required units:</i>	10

Professional Graduate Series in Creative Writing (certificate)

	Units
All Specializations	
<i>Core Courses</i>	
Four sections of MCW 411 Studies in Writing Poetry, 413 Studies in Fiction Writing, or 461 Studies in Writing Creative Nonfiction, depending on genre concentration	4
<i>Total required units:</i>	4

Creative Writing (MFA)
Master of Fine Arts Degree Requirements

Courses	Units
<i>Core Courses</i>	
Five workshops in one genre (fiction, poetry, or creative nonfiction)	5
One cross-genre course (MCW 479 or 480)	1
MCW 570 Seminar on Teaching Creative Writing	1
MCW 579 Practicum in Teaching Creative Writing	1
Two interdisciplinary writing studios (MCW 495)	2 ¹
<i>Electives</i>	
6 courses drawn from literature studies in the MALit program, special topics courses, and internships in publishing. Must include 3 literature courses, including at least 1 with a LIT prefix.	6
<i>Thesis</i>	
MCW 590 Thesis Research (must be registered for twice)	2
<i>Total required units:</i>	18

¹ This is no longer a requirement for students admitted to the MFA program in the 2008-9 academic year. Students who took MCW 495: Interdisciplinary Writing Studio may apply this credit to their workshop or elective requirement. Please contact your academic coordinator to officially apply this credit towards your degree.

Liberal Studies

Master of Arts Degree Requirements

Courses	Units
At least two of the following seminars:	2 - 3
IPLS 401 Seminar in Liberal Studies I	
IPLS 402 Seminar in Liberal Studies II	
IPLS 403 Seminar in Liberal Studies III	
Electives in humanities and related social sciences; may be applied toward a specialization (4 courses) in either: American Studies, History, Religious and Ethical Studies, or an individualized specialization	5 - 6
Capstone Project, supported by either:	1
IPLS 590 Thesis Research (see Master's Thesis) - <i>or</i> -	
Additional elective	
Total required units:	9

Professional Graduate Series in Liberal Studies (certificate)

	Units
All Specializations	
Core Courses	
1 section of IPLS 401, 402, or 403	1
Any other 3 other MALS classes	3
Total required units:	4

Literature

Master of Arts Degree Requirements

Courses	Units
English 410 Introduction to Graduate Study	1
Literature Courses (400- or 500-level)	4
Electives in literature or related humanities; may be applied toward a specialization (4 courses) in either: American Literature, British Literature, Comparative and World Literatures, or an individualized specialization.	3
Capstone Project, supported by either:	1
ENGLISH 590 Thesis Research (see Master's Thesis) - <i>or</i> -	
Additional elective	
Total required units:	9

Professional Graduate Series in Literature (certificate)

	Units
All Specializations	
Core Courses	
English 410 Introduction to Graduate Study	1
Any other 3 MALit classes	3
Total required units:	4

Medical Informatics Master of Science Degree Requirements

Courses	Units
Track Courses (as required upon admission)	0-4
<i>Clinical Track</i>	
CIS 313 Telecommunications & Computer Networks	
CIS 317 Introduction to Databases	
<i>Technologist Entry Path</i>	
MED INF 401 American Health Care System	
MED INF 402 Introduction to Clinical Thinking	
Core courses	7
PUB HLTH 302 Introduction to Biostatistics	
MED INF 403 Introduction to Medical Informatics	
MED INF 404 Health Care Enterprise Operations	
MED INF 405 Health Care Information Tech Integration & Standards	
MED INF 406 Decision Support Systems & Health Care	
MED INF 407 Legal, Ethical & Social Issues in Informatics	
MED INF 408 Medical Technology Acquisition & Assessment	
Other Required Courses	2-4
LEADERS 481 Foundations of Leadership	
MED INF 590 Thesis Research ¹	
Additional electives necessary to reach 11 unit requirement	
Total required units:	11-13²

¹ 08-09 students may take MED_INF 498 'Capstone Project' in substitution for MED_INF 590

² The minimum number of units required for the degree is 11. Students who have completed all other curriculum requirements and have fewer than eleven units should complete sufficient additional electives to meet this requirement. Consult the student handbook for further information.

Professional Graduate Series (certificate)

Medical Informatics	Units
any necessary prerequisite track courses, determined by SCS	0-4
Core Courses	
MED 403 Introduction to Medical Informatics	1
any three MED INF courses (except 590)	3
Total required units:	4-8

Medical Informatics- Distance Learning Master of Science Degree Requirements

Courses	Units
Track Courses (as required upon admission)	0-4
<i>Clinical Track</i>	
CIS 313-DL Telecommunications & Computer Networks	1
CIS 317-DL Introduction to Databases	1
<i>Technologist Track</i>	
MED INF 401-DL American Health Care System	1
MED INF 402-DL Introduction to Clinical Thinking	1
Core courses	
MED INF 403-DL Introduction to Medical Informatics	1
MED INF 404-DL Health Care Enterprise Operations	1
MED INF 405-DL Health Care Information Tech Integration & Standards	1
MED INF 406-DL Decision Support Systems & Health Care	1
MED INF 407-DL Legal, Ethical & Social Issues in Informatics	1
MED INF 408-DL Medical Technology Acquisition & Assessment	1
MED INF 409-DL Biostatistics	1
Other Required Courses	
LEADERS ¹ 481-DL Foundations of Leadership	1
<i>One of the following:</i>	
MED INF 498-DL Capstone Project – or -	1
MED INF 590-DL Thesis Research	1
Additional health industry or CIS electives necessary to reach 11 unit requirement	0-2
<i>Total required units:</i>	11-13²

¹ From Fall 2009, this course is titled MED_INF 481-DL 'Foundations of Leadership'

² The minimum number of units required for the degree is 11. Students who have completed all other curriculum requirements and have fewer than eleven units should complete sufficient additional electives to meet this requirement. Consult the student handbook for further information

**Public Policy and Administration
Master of Arts Degree Requirements**

Courses	Units
Core courses	
MPPA 402 Elements of Public Finance & Budgeting	1
MPPA 403 Fundamentals of Public Administration	1
MPPA 405 Elementary Statistics for Political Research	1
MPPA 406 Analytic Methods for Public Policy Analysis	1
MPPA 407 Scope and Dynamics of Public Policy	1
MPPA 408 Sociology of Organizations	1
MPPA 409 Applied Research and Writing	1
Concentration area courses (choose four electives in one of these areas of concentration)	4
<i>Health Services Policy</i>	
<i>Public Policy</i>	
<i>Public Safety and Security</i>	
<i>Urban Policy and Planning</i>	
Other Required Courses	
MPPA 590 Thesis Research	1
LEADERS 481 Foundations of Leadership	1
Total Required Units	13

Professional Graduate Series Requirements

Please note: overlapping courses may count toward one PGS only

	Units
Public Safety and Security	
Core Courses	
Any four courses from the PSS specialization	4
Total required units:	4

	Units
Urban Policy and Administration	
Core Courses	
Any four courses from the UPA specialization	4
Total required units:	4

Quality Assurance and Regulatory Science (MQARS)

Master of Science Degree Requirements

Courses	Units
Core Courses	7
QARS 401 Regulation and Quality Systems	
QARS 405 Applied Research and Writing	
QARS 410 Introduction to Statistical Methods	
QARS 420 Practical Laboratory Management	
QARS 421 Applied Quality and Regulatory Practices	
QARS 430 Ethical and Legal Issues in Regulation and Quality	
QARS 435 Risk and Decision Management	
Electives	2
Any two elective courses	
Other Required Courses	2
LEADERS 481 Foundations of Leadership	
QARS 590 Capstone Project	
Total required units:	11

Professional Graduate Series Requirements

Quality Assurance and Regulatory Science	Units
Core Courses	
Any five courses from the MQARS curriculum	5
Total required units:	5

**Sports Administration (MSA)
Master of Arts Degree Requirements**

Courses	Units
Core Courses	
MSA 400 Sports in the Social Context	1
MSA 401 Sports Research Methods & Quantitative Analysis	1
MSA 402 Fundamentals of Sports Marketing	1
MSA 403 Management and Organization of Sports	1
MSA 404 Principles of Sports Finance & Accounting	1
MSA 405 Legal & Ethical Issues in Sports Management	1
MSA 406 Sports Risk Management	1
Concentration area courses (choose two electives in one of these areas of concentration)	2
<i>Sports Management</i>	
<i>Sports Marketing & Public Relations</i>	
Other Required Courses	
LEADERS 481 Foundations of Leadership	1
MSA 590 Thesis Research or Practicum	1
Total required units:	11

Professional Graduate Series Requirements

Please note: overlapping courses may count toward one PGS only

	Units
Sports Management	
Core Courses	
MSA 400 Sports in the Social Context	1
MSA 401 Sports Research Methods & Quantitative Analysis	1
Any two additional MSA courses	2
Total required units:	4

	Units
Sports Marketing and Public Relations	
Core Courses	
MSA 400 Sports in the Social Context	1
MSA 401 Sports Research Methods & Quantitative Analysis	1
MSA 402 Fundamentals of Sports Marketing	1
Any one additional course from the Marketing and PR specialization	1
Total required units:	4