

- C&I 330 Early Childhood Education/Curriculum
- C&I 355 Child in the Family
- C&I 453 Introduction to Special Education Law and Policy
- C&I 367 Preschool Practicum
- EDU 345 (C&I 410) Exceptionality and Classroom Management
- C&I 420 Curriculum in Early Childhood Special Education
- C&I 421 Issues in Early Childhood Special Education
- C&I 494 Practicum in Special Education Preschool
- C&I 495 Special Topics in Special Education
- HFD 498 Internship (must complete all course work prior to taking course)
- HFD 413 Assessment & Program Planning
- PHAR 110N Use and Abuse of Drugs
- PSYX 297 (PSYC 397) Research Experience
- PSYX 378 (PSYC 335) Into to Clinical Psychology

School-Age

- EDU 221 (C&I 303) Educational Psychology/Measurements
- EDU 345 (C&I 410) Exceptionality/Classroom Management
- PHAR 110N Use and Abuse of Drugs
- PSYX 378 (PSYC 335) Intro to Clinical Psychology
- PSYX 345 (PSYC 336S) Child and Adolescent Development Disorders
- PSYX 376 (PSYC 337) Principles of Cognitive Behavior Modification
- SOCI 332 (SOC 300) Sociology of the Family
- SOCI 330 (SOC 330) Juvenile Delinquency
- SW 300 Human Behavior and Social Environment
- SW 420S Child Abuse and Neglect

Adolescence

- EDU 221 (C&I 303) Educational Psychology/Measurements
- EDU 345 (C&I 410) Exceptionality/Classroom Management
- PHAR 110N Use and Abuse of Drugs
- PSYX 378 (PSYC 335) Intro to Clinical Psychology
- PSYX 345 (PSYC 336) Child and Adolescent Psychological Disorders
- PSYX 376 (PSYC 337) Principles of Cognitive Behavior Modification
- SOCI 332 (SOC 330) Sociology of the Family
- SOCI 330 (SOC 330) Juvenile Delinquency
- SW 300 Human Behavior and Social Environment
- SW 450 Children and Youth at Risk

Gerontology

- HS 325 Clinical Issues in Geriatrics
- HS 327 Montana Gerontology Society Annual Conference
- HS 495 Special Topics: Health Aspects of Aging
- PSYX 233 (PSYC 245) Fundamentals of Psychology of Aging
- SW 455S Social Gerontology

Family Development

- COMM 410 Communication in Personal Relationships
- COMM 311 Family Communication
- C&I 355 Child in the Family
- PSYX 348 (PSYC 385) Psychology of Family Violence

- SOCI 332 (SOC 300) Sociology of the Family
- SW 423/PSYX 441 (PSYC423)/SOCI 433 (SOC 432) Addiction Studies
- SW 450 Children and Youth at Risk

Human and Family Development Committee

Dan Doyle, Ph.D., University of Washington, 1984 (Professor, Sociology)

Christine Fiore, Ph.D., University of Rhode Island, 1990 (Professor, Psychology)

Ann Garfinkle, Ph.D., University of Washington, 1995 (Associate Professor, Education)

Shannon Guilfoyle, M.Ed., The University of Montana, 2002 (COTEACH Preschool Coordinator, Education)

Susan Harper-Whalen, Ed.M., Harvard University, 1984 (Research Faculty, Education)

Lynne S. Koester, Ph.D., University of Wisconsin, Madison, 1976 (Professor, Psychology)

Ted Maloney, M.A. (Adjunct Assistant Professor, Rural Institute: Center for Excellence in Disability Education, Research and Service)

Susie Morrison, Ed.S., The University of Montana, 1995 (Assistant Research Professor, Psychology)

Lucy Hart Paulson, M.S., University of Illinois, 1980 (Research Assistant Professor, Education)

Audrey Peterson, M.S., Pennsylvania State University, 1970 (Professor, Education)

Alan Sillars, Ph.D., University of Wisconsin, 1980 (Professor, Communication Studies)

Paul Silverman, Ph.D., University of Georgia, 1977 (Professor, Psychology)

John Spores, Ph.D., University of Michigan, 1976 (Professor, Social Work)

Meg Traci, Ph.D., The University of Montana, 2000 (Project Director, Rural Institute: Center for Excellence in Disability Education, Research and Service)

Richard van den Pol, Ph.D., Western Michigan University, 1981 (Professor, Education)

Kimberly A. Wallace, Ph.D., University of Notre Dame, 1999 (Associate Professor, Psychology)

Celia Winkler, Ph.D., University of Oregon, 1996 (Professor, Sociology)

Courses

U = for undergraduate credit only, UG = for undergraduate or graduate credit, G = for graduate credit. R after the credit indicates the course may be repeated for credit to the maximum indicated after the R. Credits beyond this maximum do not count toward a degree

Human and Family Development (HFD)

U 298 Internship Variable cr.(R-4) Prereq., consent of chair. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

U 398 Internship Variable cr. (R-4) Prereq., consent of chair. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

UG 411 Infant and Toddler Development and Variability 3 cr. Offered autumn even-numbered years. Foundation of knowledge and practical experiences in infant and toddler development and its variability. Development of the child within the

family and social context.

UG 412 Family Development 3 cr. Offered autumn even-numbered years. Foundation of knowledge and practical experiences in family development from an ecological, family systems perspective. Focus on families who have children with disabilities.

UG 413 Assessment and Program Planning 4 cr. Offered spring odd-numbered years. Prereq., consent of instr. Foundation of knowledge and practical experiences in child assessments and family information gathering. Primary focus on birth through two years of age.

UG 414 Community Service Delivery I 2 cr. Offered spring odd-numbered years. Foundation of knowledge and practical experiences in early intervention service models and their theoretical orientation, roles of other agencies and professional disciplines, teaming models and techniques, support coordination models and techniques, community collaboration, and current early intervention trends and models.

UG 415 Program Development, Implementation, Evaluation and Modification 4 cr. Offered autumn odd-numbered years. Prereq., consent of instr. Foundation of knowledge and practical experiences in program planning, implementation and evaluation. Focus on birth through two years of age.

UG 416 Data-Based Decision Making 2 cr. Offered autumn odd-numbered years. Prereq., consent of instr. Foundation of knowledge and applied experience in making intervention and programmatic decisions based on data. Primary topical areas covered are (1) foundations of applied behavioral analysis; (2) technical competencies in applied behavioral analysis; (3) facilitating acquisition of skills; and (4) skill generalization for individuals across the life-span.

UG 490 Practicum in Human Development Variable cr. (R-6) Offered intermittently. Prereq., 12 credits in HFD. Supervised fieldwork in settings relevant to developmental topics, including school classrooms; child/family welfare agencies; various institutions and programs for children, juveniles, or the aged.

UG 494 Seminar in Human Development 1 cr. (R-3) Offered autumn. Discussion of selected problems in human development. Emphasis on integrating theory and practice.

UG 495 Special Topics Variable cr. (R-9) Offered intermittently. Experimental offerings of visiting professors, new courses, or one-time offerings of current topics.

UG 498 Internship Variable cr. (R-4) Prereq., consent of chair. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

International Development Studies

- Requirements for a Minor
- Faculty

Peter Koehn (Professor of Political Science), Advisor

International Development Studies is an interdisciplinary field of study focusing on the interconnected processes of social, political, economic, cultural, and environmental change taking place in poor countries and poorer regions of wealthy countries. Coursework in the minor emphasizes a global perspective on the process of change and development, critical analysis of the role of internal and external influences on the development process, and applications to local (including Montana) situations and challenges. The IDS minor takes advantage of existing faculty expertise and courses to offer an interdisciplinary experience for those students interested in either international or domestic development work. Students minoring in IDS will develop knowledge and skills appropriate for graduate study and for working in non-governmental organizations, international and bilateral government development organizations, the U.S. Peace Corps and other national/international equivalents, and /or community–development groups. The completion of the IDS minor also qualifies students for the UM Peace Corps Preparatory Program's generalist certificate.

Requirements for a Minor

To earn a minor in International Development Studies the student must successfully complete a minimum of 21 credits (at least 7 upper-division). Of the 21 credits, 12 must be core courses and 9 must be content courses chosen from the following lists. Specialized independent study and internship credits can be counted for content credit when approved by the advisor.

Core Courses:

- ANTH 329 Social Change in Non-Western Societies
- COMM 251X International and Development Communication
- ECNS 217X (ECON 350) Economic Development
- ECNS 450 (ECON 450) Advanced Topics in Economic Development
- EVST 487 Globalization, Justice and the Environment
- FOR/RSCN 170 International Environmental Change
- FOR/RSCN 424 Community Forestry and Conservation
- FOR/RSCN 475 Sociology of Environment and Development
- GPHY 141S (GEOG 103) Geography of World Regions
- PSCI 431 (PSC 431) Politics of Global Migration
- PSCI 463 (PSC 463S) Development Administration
- RECM 451 Tourism and Sustainability
- SOCI 270 (SOC 270) Introduction to Rural and Environmental Change
- SOCI 371 (SOC 370S) Social Change and Global Development
- SW 323 Women and Social Action in the Americas
- SW 465 Social Work in a Global Context

Content Courses:

- ANTH 330X Peoples and Cultures of the World
- ANTH 343S Culture and Population
- ANTH 385S Indigenous Peoples and Global Development
- BUS 160S Issues in Sustainability
- COMM 421 Communication and Nonprofit Organizations
- COMM 451 Intercultural Communication
- ECNS 101S (ECON 100S) Economic Way of Thinking
- EVST 410 Environmental Justice in Latin America
- EVST 440 Environmental Economics
- FOR/RECM/GPHY 352 Himalayan Environment and Development
- FOR/RECM/GPHY 353 Tourism, Livelihoods and Sustainability in the Himalaya
- GPHY 121S (GEOG 101S) Introduction to Human Geography
- GPHY 243X (GEOG 207S) Africa
- GPHY 245X (GEOG 213S) The Middle East
- GPHY 432 (GEOG 432)/EVST 432 Human Role in Environmental Change
- GPHY 433 (GEOG 333S) Cultural Ecology
- GPHY 434 (GEOG 434) Food and Famine
- GPHY 444 (GEOG 410) High Asia
- HSTR 231X (HIST 287H) Latin America, 1800–1990s
- HSTR 241 (HIST 214S/GEOG 241S) Central Asian Culture and Civilization
- HSTR 384E (HIST 335E) History of International Human Rights
- NASX 475X (NAS 400X)/PSCI 475X (PSC 475) Native American Sovereignty
- PSCI 220S (PSC 120S) Introduction to Comparative Government
- PSCI 230 (PSC 130E) International Relations
- PSCI 325 (PSC 325) Politics of Latin America
- PSCI 326 (PSC 326H) Politics of Africa

- PSCI 327 (PSC 327) Politics of Mexico
- PSCI 343 (PSC 343) Politics of Social Movements
- PSCI 432 (PSC 430) Inter–American Relations
- SOCI 212S (SOC 212S) Southeast Asian Culture and Civilization
- SOCI 346 (SOC 346) Rural Sociology
- SOCI 355 (SOC 355) Population and Society
- SOCI 443 (SOC 322) Sociology of Poverty
- SW 324 Gender and the Politics of Welfare

With permission of a core faculty member, up to 6 credits of field experience in international development can be counted toward the content requirements.

Faculty

Jill Belsky, Ph.D., Cornell University, 1991 (Professor, Society and Conservation)

Jeff Bookwalter, Ph.D., University of Utah, 2000 (Associate Professor, Economics)

Keith Bosek, Ph.D., University of Georgia–Athens, 2006 (Professor, Society and Conservation)

Janet Finn, Ph.D., University of Michigan, 1995 (Associate Professor, Social Work)

Paul Haber, Ph.D., Columbia University, 1992 (Professor, Political Science)

Sarah Halvorson, Ph.D., University of Colorado, Boulder, 2000 (Professor, Geography)

Peter Koehn, Ph.D., University of Colorado, Boulder, 1973 (Professor, Political Science)

Kimber Haddix McKay, Ph.D., University of California, Davis, 1998 (Associate Professor, Anthropology)

Phyllis B. Ngai, Ed.D., The University of Montana, 2004 (Adjunct Assistant Professor, Communication Studies)

Ranjan Shrestha, Ph.D., Ohio State University, 2006 (Assistant Professor, Economics)

Steve Siebert, Ph.D., Cornell University, 1990 (Professor, Forest Management)

Teresa Sobieszczyk, Ph.D., Cornell University, 2000 (Associate Professor, Sociology)

Daniel Spencer, Ph.D., Union Theological Seminary, 1994 (Associate Professor, Environmental Studies)

Latin American Studies

- Requirements for a Minor
- Faculty

Maria Jose Bustos Fernandez (Professor of Modern and Classical Languages and Literatures) Director/Advisor

The Latin American Studies program at The University of Montana–Missoula provides students an opportunity to study and research the history, culture, lands, art, geography and institutions of Spanish and Portuguese speaking nations of American through an interdisciplinary perspective. The growing importance of the United States economic, political and cultural relations with the Latin American region makes knowledge of Latin America and its people an essential part of a liberal arts education.

The Latin American Studies program is administered by the Latin American Studies steering committee. The interdisciplinary faculty who teach and direct research in the program, drawn mainly from the College of Arts and Sciences, are internationally known for their research and experience abroad. The program encourages and promotes travel and exchange with institutions of higher education in Latin America. Several study abroad options in Latin America are available both for a short period of time or for longer stays (one semester or two semester programs). Inquire at the Departments of Modern and Classical Languages and Literatures, Political Sciences and Art for details on these programs as well as at the Office of

International Programs.

The Latin American studies program offers a Minor in Latin American Studies in conjunction with a major in another discipline. Students admitted to the program must register with the academic advisor of the Latin American Studies program who will review their course of study and advise on planning their course sequence. Students are encouraged to plan this option early in their studies to be able to participate in a study abroad program, if possible.

Students minoring in Latin American Studies will be prepared for graduate study or for employment in fields such as government, non-governmental organizations, business, industry, health and education.

Requirements for a Minor

To earn a minor in Latin American studies a student must:

1. Complete a minimum of 18 semester credits in approved Latin American studies courses (all courses listed below in addition to special offerings) in at least three different disciplines. One of these courses must be MCLG 100H, Introduction to Latin American Studies.
2. Complete SPNS 101 through 201 (SPAN 101 through 201), or equivalent.

Note: Participation in a study abroad program is highly recommended.

Latin American Studies Core Curriculum:

- MCLG 100H Introduction to Latin American Studies 3 cr.
- MCLG/LS 358 Latin American Civilization through Literature and Film 3 cr. or SPAN 359 Spanish American Civilization through Literature and Film 3 cr.
- SPNS 331 (SPAN 312L) Introduction to Latin American Literature 3 cr.
- SPNS 432 (SPAN 450L) Latin American Literature 3 cr. (R-6)
- SPNS 494 (SPAN 494) Seminar Variable cr. (R-12) (when topic is related to Latin American literature such as Latin American drama, poetry, novel, short story, Argentinian literature, 19th Century Latin American Literature)
- HSTR 230H (HIST 286H) Colonial Latin America 3 cr.
- HSTR 231X (HIST 287H) Modern Latin America 3 cr.
- HSTR 334 (HIST 385) Latin America: Reform and Revolution 3 cr.
- HSTR 435 (HIST 485) Latin America: Memories of Politics and Politics of Memory 3 cr.
- HSTR 436 (HIST 486) Latin America: Workers and Labor History 3 cr.
- PSCI 325 (PSC 325) Politics of Latin America 3 cr.
- PSCI 327 (PSC 327) Politics of Mexico 3 cr.
- PSCI 432 (PSC 430) Inter-American Relations 3 cr.
- PSCI 463 (PSC 463S) Development Administration (when offered during summer session in Mexico)
- ART/NAS 367 Art of the Ancient Americas 3 cr.
- ART/NAS 368 Latin American Art 3 cr.
- ART 451 Seminar in Art History and Criticism 3 cr. (when topic refers to Latin America)
- SW 323 Women and Social Action in the Americas 3 cr.
- ANTH 354 Mesoamerican Prehistory 3 cr.
- EVST 410 Environmental Justice in Latin America (credits variable)

Faculty

Professors

David Aronofsky, J.D., University of Texas, 1982 (Law)

Maria José Bustos Fernandez, Ph.D., University of Colorado, Boulder, 1990 (Modern and Classical Languages and Literatures)

Hipolito Rafael Chacón, Ph.D., University of Chicago, 1995 (Art)

John E. Douglas, Ph.D., University of Arizona, 1990 (Anthropology)

Janet Finn, Ph.D., University of Michigan, 1995 (Social Work)

Paul Haber, Ph.D., Columbia University, 1992 (Political Science)

Clary Loisel, Ph.D., University of Florida, 1996 (Modern and Classical Languages and Literatures)

Stan Rose, Ph.D., University of Wisconsin, 1969 (Modern and Classical Languages and Literatures)

Associate Professors

Eduardo Chirinos, Ph.D., Rutgers University, 1997 (Modern and Classical Languages and Literatures)

Jannine Montauban, Ph.D., Rutgers University, 2000 (Modern and Classical Languages and Literatures)

Daniel Spencer, Ph.D., Union Theological Seminary, 1994 (Environmental Studies)

Assistant Professor

Jody Pavilack, Ph.D., Duke University, 2003 (History)

Liberal Studies Program

- Special Degree Requirements
- Suggested Course of Study
- Courses
- Faculty

Stewart Justman, Director

The Liberal Studies Program offers students the opportunity to work in a combination of disciplines within the humanities, including literature, philosophy, and history as well as neighboring fields. The Liberal Studies Program offers degree options in:

- General Humanities
- Asian Studies
- Religious Studies
- Women's and Gender Studies

In addition, the Liberal Studies Program offers a minor in Liberal Studies and South and Southeast Asian Studies.

The Liberal Studies curriculum is designed for the student who seeks a liberal education with emphasis on the humanities. While allowing ample room for electives, the coursework for the LS major focuses on the literary and religious works, cultural records, and ideas that enrich our common inheritance. The aim of the program is to foster critical understanding and appreciation of our inheritance and world through the study and discussion of these texts and traditions. Emphasis in all cases is on critical thinking, close reading of primary sources, analytical writing, and historical understanding. Students who graduate from the program will be prepared to enter various fields in the private and public sectors, pursue further professional training, and be better prepared to meet the demands of citizenship. More information about the program is available at the Liberal Studies Program office in LA 101, (406) 243-2949, or online at www.cas.umt.edu/liberal. For advising assistance contact the humanities advisor in LA 145 or call (406) 243-6032.

Majors in Liberal Studies may not take any course work presented for LS credit on a pass/not pass basis. Upper-level students transferring into this program should have at least a C average in all credits attempted. The upper-division writing expectation must be met by successfully completing an upper-division writing course from the approved list in the General University Requirements section of this catalog (such as LS 494).

General Humanities Option

Degree Requirements**Lower-Division Curriculum (courses numbered under 300)**

1. Liberal Studies 151L and 152L, Introduction to Humanities 8 cr.
2. Literary Studies - American or British 3 cr.
3. Historical Studies - American or European History 3 cr.
4. Asian Studies 3 cr. (including courses in Religious Studies, Anthropology, Geography, and Sociology)
5. Religious Studies 3 cr.

Students must also satisfy the following requirements:

1. WRIT 101 (ENEX 101) Composition (coreq. or prereq. to LS 151L – 152L) 3 cr.
2. Foreign Language (second year proficiency in one language, demonstrated by satisfactorily completing four semesters of one language through 202, or by receiving an equivalent score on competence exam), 18 cr.

Upper-Division Curriculum (courses numbered 300 and above)

1. History 3 cr.
2. Philosophy/Political Philosophy 3 cr.
3. Women's and Gender Studies or Native American Studies or African-American Studies 3 cr.
4. Liberal Studies (from among LS 326, 327, 368, 428) 6 cr.
5. Religious Studies 6 cr.
6. Senior Liberal Studies capstone seminar 3 cr.

Suggested Course of Study

The course of study for Liberal Studies majors varies greatly depending on student interest and course availability. The core curriculum typically takes more than two years to complete, while the upper-division requirements typically take less than two years. Following is one possible course of study for the first two years:

First Year	Autumn	Spring
WRIT 101 (ENEX 101) Composition	3	-
Foreign Language 101 and 102 Elementary	5	5
Historical Studies - American or European	-	4
LS 151L and 152L Introduction to Humanities	4	4
M 105 (MATH 107) Contemporary Mathematics 3	-	-
Lower-division Native American Studies	-	3
Total	15	16
Second Year	Autumn	Spring
Foreign Language 201 and 202 Intermediate	4	4
Literary Studies - American or British	-	3
Lower-division Religious Studies	3	-
Lower-division Asian Studies	-	3
General Education Requirements	9	6
Total	16	16

Liberal Studies Minor

To earn a minor in Liberal Studies, students must complete the following 23 credits:

- Liberal Studies 151L, 152L and 161H
- Six credits from among LS 326, LS 327L, LS 368, and LS 428
- Six credits from among upper-division Religious Studies courses

Asian Studies Option, Professor Bradley Clough, Advisor:

The Asian Studies Option offers opportunities for those students who wish to focus on the diverse societies of the Asian continent through the study of literature, geography, history, peoples, religious and other cultural traditions, and languages.

Interested students must major in Liberal Studies with an option in Asian Studies. In addition to select Liberal Studies courses, students will choose from specified courses offered in many departments and programs in the College of Arts and Sciences, such as History, Japanese Studies, Chinese Studies, Anthropology, Sociology, Geography, and Religious Studies.

Students who choose the Asian Studies option must meet with the Asian studies faculty advisor.

Degree Requirements

Lower-Division Requirements

Language Requirement:

Two years (or equivalent proficiency) in an Asian language appropriate to the student's academic goals and approved by the academic advisor. Students who plan to pursue graduate work are strongly advised to complete three years, including at least one study abroad in Asia experience.

Liberal Studies, Introduction to the Humanities (8 credits)

LS 151L, 4 cr.

LS 152L, 4 cr.

Introductory Asian Studies (3 credits)

Choose one course from the following:

SSEA/LS 102 Introduction to South and Southeast Asia

LS 161H Introduction to Asian Humanities

Foundational Asian Studies (9 credits)

Choose two courses from the following:

HSTR 240 (HIST 201H) East Asian Civilizations

SSEA/LS 202 South Asia

JPNS 150H (JPNS 210H)/MCLG/LS 150H Japanese Culture and Civilization

CHIN/LS 211H (MCLG 211H) Chinese Culture and Civilization

SOCI 212S (SOC 212H)/SSEA 212S Social Issues in Southeast Asia

And, choose one course from the following:

RLST 232H (RELS 232H) Buddhism

RLST 233 (RELS 233) Traditions of Buddhist Meditation

RLST 234 (RELS 234) Hinduism

RLST 236 (RELS 236) Chinese Religions

RLST 238 (RELS 238) Japanese Religions

Upper-Division Requirements

Choose 21 credits (7 courses, all 3 credits) from the following list:

RLST 353 (RELS 353) Topics in South Asian Religions

RLST 354 (RELS 354) Topics in East Asian Religions

RLST 360 (RELS 360) Classics in Buddhist Literature

RLST 366 (RELS 366) Tibetan Civilization

RLST 367 (RELS 367) Approaches to the Study of Zen Buddhism

RLST 368 (RELS 368) Contemporary Buddhism in South and Southeast Asia

RLST 369 (RELS 369) Contemplative Traditions of Asia

CHIN/MCLG/LS 313L Classical Chinese Poetry in English Translation

CHIN/MCLG/LS 314L Traditional Chinese Literature in English Translation

CHIN/MCLG/LS 432 Twentieth Century Chinese Fiction in English Translation

GPHY 444 (GEOG 410) High Asia
 HSTR 343 (HIST 381H) Modern Japan
 HSTR 345 (HIST 380H) Modern China
 HSTR 448 (HIST 481) Tradition and Reform in China
 HSTR 449 (HIST 482) Revolution and Reform In China
 JPNS/MCLG 311 Classical Japanese Literature in English Translation
 JPNS/MCLG 312 Japanese Literature from Medieval to Modern Times in English Translation
 JPNS 386 History of Japanese Language
 JPNS 391 (JPNS 395) Special Topics
 JPNS 411 Modern Japanese Writers and Thinkers
 JPNS 431 Post-War Japanese Literature
 PSCI 329 (PSC 329) Politics of Japan

Religious Studies Option, Professor Paul Dietrich, Advisor:

Religion has been taught as an academic discipline at the University of Montana since 1924. Located within the Liberal Studies Program, the study of religion is pursued in the University in an interdisciplinary setting that offers opportunities for exploration and discovery in many areas of the humanities, art, and sciences. Our Religious Studies courses emphasize the scholarly analysis and interpretation of the history, literature, beliefs, myths, symbols, rituals, ethical and legal codes, and communities and institutions of the world's religious traditions.

We investigate how the world's religions address enduring human questions and influence responses to daily problems, and we explore religious traditions shape lives and societies, from the emergence of the earliest civilizations to 21st-century global conflicts. Our students engage ideas about the good life and death, suffering and happiness, war and peace, revelation and salvation, God, mysticism, and religious experience. The curriculum is designed to provide students with a broad and deep understanding of religion as a field of human activity and inquiry. Students acquire the skills necessary to investigate specific religious traditions in historical depth and to understand the forms, expressions, and roles of religion in the world today.

Degree Requirements

1. Two years of a single foreign language: 18 cr.
2. LS 151L 4 cr., LS 152L 4 cr., LS 161H 3 cr.
3. Two 200-level Religion courses, including one from among RLST 204H, 205, 221, or 225 (RELS 106H, 107, 220, and 225); and one from among RLST 232H, 234, 236, or 238 (RELS 232H, 234, 236, and 238): 6 cr.
4. RLST 300 (RELS 300) Theory and Method in the Study of Religion: 3 cr.
5. Five courses from among NASX 304E (NAS 301E), RLST 310 (RELS 310), RLST 320 (RELS 320), RLST 335 (RELS 335), RLST 336 (RELS 336), RLST 353 (RELS 353), RLST 354 (RELS 354), RLST 360 (RELS 360), RLST 366 (RELS 366), RLST 367 (RELS 367), RLST 368 (RELS 368), RLST 369 (RELS 369), RLST 370 (RELS 370), RLST 376 (RELS 376), RLST 381E (RELS 381E), and AAS 374 and AAS 417: 15 cr.
6. Two LS courses with Religious Studies content (e.g. LS 342): 6 cr.

Please consult the Religious Studies section of this catalog for further information.

Women's and Gender Studies Option, Professor Elizabeth Hubble and Professor Ione Crummy, Co-Directors of the Women's and Gender Studies Program:

Students who choose the Women's and Gender Studies (WGS) option must register with the WGS advisor, who will supervise their program. The following requirements must be met to complete the WGS option within the liberal studies major.

Degree Requirements

1. WRIT 101 (ENEX 101) Composition (coreq. or prereq. to LS 151L-152L) 3 cr.
2. Foreign language (four sequential semesters of one language) 18 cr.
3. Liberal Studies 151L, and 152L Introduction to Humanities 8 cr.

4. Literary Studies-American or British 3 cr.
5. Historical Studies-American or European History 3 cr.
6. Asian Studies (including courses in Religious Studies, Anthropology, Geography, and Sociology) 3 cr.
7. Religious studies 3 cr.
8. Completion of WGS 119H/PHL 151H (PHIL119H)/LS 119H
9. At least 21 credits of course work in relevant, advisor approved WGS courses numbered above 299. Each semester a list of these courses is published at pre-registration by the Women's Studies office, LA 138A, (406) 243-2584. Please consult the Women's and Gender Studies section of the catalog for additional information.

South and Southeast Asian Studies Minor, Professor Ruth Vanita, Advisor

The Liberal Studies Program offers undergraduates at the University of Montana-Missoula an opportunity to minor in South and Southeast Asian Studies (SSEA). Students will study South and Southeast Asian peoples, cultures, histories, societies, as well as their literary, artistic and religious traditions. The minor encompasses the regions of South and Southeast Asia, including the states of India, Nepal, Bhutan, Tibet, Sri Lanka, Bangladesh, Myanmar (Burma), Thailand, Laos, Cambodia, Vietnam, Malaysia, Brunei, Singapore, Indonesia, East Timor, and the Philippines.

The South Asian faculty of Liberal Studies and the Dean of the College of Arts and Sciences work closely with those faculty from other disciplines at the University of Montana who have research and teaching interests, and competency in regional languages of either South or Southeast Asia.

Students may choose to minor in South and Southeast Asian Studies with a major in any discipline. They must meet with Professor Ruth Vanita, the advisor, and are encouraged to plan their course sequence at least one semester in advance.

Requirements for Minor

1. ANTY/SSEA/LS 102H (three credits).
2. Six credits from the following lower division (100-200) courses: (SSEA/LS 202X, SSEA/RLST 232H (RELS 232H), SSEA/RLST 234 (RELS 234), and SSEA/SOCI 212S (SOC 212H))
3. Nine credits from the following upper-division (300 and above) courses, of which at least 3 credits must be in the humanities (SSEA 342, SSEA 353, SSEA 366, SSEA 368), and 3 credits in the social sciences (SSEA 330X and SSEA 440)
4. No language courses are required. However, students are encouraged to study regional languages through summer institutes, such as SEASSI, or through accredited study abroad experiences in either South, or Southeast Asia.

The following is a list of SSEA courses for the Minor. Please refer to the SSEA section of the catalog for additional details.

Lower-division courses

ANTY/SSEA/LS 102H Introduction to South and Southeast Asia
 SSEA 191 Special Topics
 SSEA/LS 202X South Asia
 SSEA/SOCI 212S (SOC 212H) Social Issues in Southeast Asia
 SSEA/RLST 232H (RELS 232H) Buddhism
 SSEA/RLST 234 (RELS 234) Hinduism
 SSEA 291 Special Topics Variable

Upper-division courses

SSEA/ANTY 330X Peoples and Cultures of the World: Indonesia and the Philippines
 SSEA/LS 342 Topics in Comparative Literature and Religion
 SSEA/RLST 353 (RELS 353) Topics in South Asian Religions
 SSEA/RLST 366 (RELS 366) Tibetan Civilization
 SSEA/RLST 368 (RELS 368) Contemporary Buddhism in South and Southeast Asia

SSEA 391 Special Topics Variable
 SSEA/ANTY 440 Contemporary Issues of Southeast Asia
 SSEA 491 Special Topics Variable

South and Southeast Asian Studies Faculty

Bradley Clough, Ph.D. Columbia University 1998. (Liberal Studies)
 Ranjan Shrestha, Ph.D. Ohio State University 2007 (Economics)
 Teresa Sobieszczyk, Ph.D. Cornell University 2001 (Sociology)
 Ruth Vanita, Ph.D. Delhi University 1992 (Liberal Studies)
 G.G. Weix, Ph.D. Cornell University 1990 (Anthropology)

Courses

U = for undergraduate credit only, UG = for undergraduate or graduate credit, G = for graduate credit. R after the credit indicates the course may be repeated for credit to the maximum indicated after the R. Credits beyond this maximum do not count toward a degree.

Liberal Studies (LS)

U 102H Introduction to South and Southeast Asia 3 cr. Offered spring. Same as ANTY 102H/SSEA 102H. An introduction to South and Southeast Asian regions, cultures, societies, and histories, with particular emphasis on artistic, religious and literary traditions from prehistory to the present. An overview approach with different materials and emphases.

U 105H Introduction to Russian Culture 3 cr. Offered autumn. Same as RUSS 105HY and MCLG 105HY. A chronological survey of Russian culture from its beginnings to the contemporary period.

U 119H Philosophical Perspectives on Women in the Western Hemisphere 3 cr. Offered intermittently. Same as PHL 151H (PHIL 119H) and WGS 119H. Introduction to the discipline and scope of Western philosophy focusing on women as the subject rather than men. A chronological study following the ideological development in the West of social attitudes and scientific theses.

U 151L Introduction to the Humanities 3-4 cr. Offered autumn. Prereq., eligibility for WRIT 101 (ENEX 101) based on writing placement examination. General survey of the field of Humanities in Western civilization contrasting the Greco–Roman with the Jewish and Christian traditions.

U 152L Introduction to the Humanities 3-4 cr. Offered spring. Prereq., eligibility for WRIT 101 (ENEX 101) based on writing placement examination. General survey of the field of Humanities in Western civilization, from the Middle Ages through modernity.

U 160L Classical Mythology 3 cr. Offered every spring; offered intermittently in summer. Same as MCLG 160L. Deities and myths of the Greeks and Romans, with emphasis on those of most importance to Western literature and art.

U 161H Introduction to Asian Humanities 3 cr. Offered autumn. Coreq., LS 151L or consent of instr. Selective survey of classical South and East Asian perspectives on the humanities. Hinduism, Confucianism, Taoism and Buddhism are the primary traditions considered.

U 170 Myth Seminar: Honors 1 cr. Offered every spring, offered intermittently in summer. Same as MCLG 170. Coreq., MCLG/LS 160L. Research, writing, and discussion about the mythologies of the Greeks and Romans in a small group setting.

U 180L Introduction to Film 3 cr. Offered every term. Same as ENFM 180L. The history and development of the film medium. Emphasis on critical analysis of selected classic or significant films.

U 195 Special Topics Variable cr. (R–9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one–time offerings of current topics.

U 202X South Asia. 3 cr. Offered alternate years. Same as LS 202. Introduction to Southern Asia, its history, cultures,

societies, artistic, religious and literary traditions from antiquity to the modern era.

U 211H Chinese Culture and Civilization 3 cr. Offered intermittently. Same as AS and CHIN 211H. A comprehensive study of Chinese culture and civilization in the manifold aspects of anthropology, sociology, economics, history, literature, religion, and philosophy.

U 212S Southeast Asian Culture and Civilization 3 cr. Offered autumn. Same as AS and SOCI 212S (SOC 212H). Introduction to the history, geography, cultures, social organization, and contemporary events of Southeast Asia.

U 221Y Germanic Mythology and Culture 3 cr. Offered intermittently. Same as MCLG 231Y. Offered alternate years. Germanic culture and mythology from 200 B.C. to 1200 A.D. Topics include the Germanic pantheon, Germanic religious practices, Germanic migrations and major literary masterpieces. Credit not allowed for LS 221Y, MCLG 231Y and GRMN 362Y (GERM 362H).

U 227L Film as Literature, Literature as Film 3 cr. (R-6) Offered intermittently. Same as LIT 270L (ENTL 227L). Studies of the relationship between film and literature. Topics vary.

U 251L The Epic 3 cr. (R-6) Offered odd-numbered years. Same as MCLG 251L. Reading, study, and discussion of epic poems. Selections will vary from Western and non-Western traditions.

U 252L Tragedy 3 cr. (R-6) Offered even-numbered years. Same as MCLG 252L. Study of the literary, artistic and philosophical dimensions of tragedy. Selections will vary.

U 282L The German Cinema 3 cr. Offered intermittently. Same as MCLG 222L. Development of the German film from its beginnings in 1895 through the contemporary New German Cinema. Topics include Expressionism, New Objectivity, the Nazi film, the German contribution to Hollywood, and the post-war film in East and West Germany. Credit not allowed for LS 282L, MCLG 222L and GRMN 322L (GERM 361L).

U 294 Seminar Variable cr. (R-6) Offered intermittently.

U 295 Special Topics Variable cr. (R-9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

U 296 Independent Study Variable cr. (R-9) Offered intermittently.

U 306L Introduction to Russian Literature I 3 cr. Offered spring. Same as MCLG and RUSS 312L. A survey of Russian poetry and prose from the mid-nineteenth century through the Symbolist period of the early 20th century. Included are the works of Gogol, Turgenev, Dostoevsky, Tolstoy, and the Symbolists.

U 307L Introduction to Russian Literature II 3 cr. Offered alternate years. Same as MCLG 307L, and RUSS 313L. A survey of Russian literature of the 20th - century and into the 21st. No knowledge of Russian is necessary.

U 308 Russian Cinema and Culture 3 cr. Offered alternate years. Same as RUSS 308, ENFM 308, and MCLG 308. Topically arranged introduction to the cinema of Russia and the former Soviet Union, with particular emphasis on contemporary Russian cinema. No knowledge of Russian is necessary.

U 309 Reading the City: Rome 3 cr. Offered autumn. Same as MCLG 309. Prereq., previous acceptance in subsequent intercession Italy program. Overview of the history of Rome from its beginnings until modern times, with lectures on various periods and artists across the spectrum of Italian art history. Orientation to the city of Rome, practicalities of life and study in the city.

U 311 Chinese Folktales 3 cr. Offered intermittently. Same as MCLG 380. The study of the aspirations, desires, loves, fears, moral and aesthetic values of the Chinese people as expressed in their folk literature.

U 313L Classical Chinese Poetry in English Translation 3 cr. Offered intermittently in spring. Same as AS, CHIN, and MCLG 313L. The works of major Chinese poets to 1300 A.D.

- U 314L Traditional Chinese Literature in English Translation 3 cr.** Offered intermittently in spring. Same as AS, CHIN, and MCLG 314L. Highlights of Chinese literature to 1800; includes philosophy, poetry, prose, and fiction.
- U 315 Major Hispanic Authors and Their Times 3 cr.** Offered autumn. Same as MCLG 315. The intensive study of the life, times, and works of a major Hispanic author.
- U 320 Women in Antiquity 3 cr.** Offered intermittently. Same as MCLG and WS 320. Examination of varied sources from ancient Greece, the Hellenistic world, and republican and imperial Rome to clarify the place of women in various communities. Women's contribution to community and the mechanisms by which communities attempted to socialize female populations.
- U 321H German Culture to 1900 3 cr.** Offered spring. Same as MCLG 330H. Overview of major events and currents in German culture to 1900 with an emphasis on the arts, literature, and intellectual movements. Credit not allowed for LS 321H and GRMN 351H (GERM 303).
- U 322H German Culture Since 1900 3 cr.** Offered spring. Same as MCLG 331H. Overview of major events and currents in the German culture from 1900 to the present with an emphasis on the arts, literature, and intellectual movements. Credit not allowed for LS 322H and GRMN 352H (GERM 304).
- U 323 Studies in Literary Forms 3 cr.** (R–9) Offered autumn and spring. Prereq., LIT 300 (ENLT 301) or consent of instr. Same as LIT 375 (ENLT 323). Reading of various authors from different literary periods and cultures working in the same mode of composition (every two years, Literature of Place, Modern Drama, 19th Century Fiction, 20th Century Fiction, Lyric Poetry, Science Fiction, Autobiography; less frequently, Travel Literature, Popular Fiction, Epic, Tragedy, Satire, Romance, Comedy).
- U 325E The Roots of Western Ethics 3 cr.** Offered intermittently. Prereq., lower-division course in Perspective 5 or consent of instr. Same as CLAS 365E (MCLG 365). Studies of the origins of Western ethical thinking in the original writings of Greek writers and their application to current situations.
- U 326 Stories East and West 3 cr.** Offered yearly. A course tracing the influence of Arabic fiction on its western counterpart.
- U 327L Gender and Sexuality in English Fiction 3 cr.** Offered alternate years. Same as WGS 379L & LIT 379L (ENLT 375L). Major 20th century novels and short stories written in English in different parts of the world and how these texts explore changing concepts of gender and sexuality.
- U 329 Fathers & Daughters in Western Literary Traditions 3 cr.** Same as WGS 329. Prereq., WRIT 101 (ENEX 101). Examines how relationships between fathers and daughters have been represented, celebrated and critiqued in literature in the Western world, from antiquity to the present.
- U 338 The French Cinema 3 cr.** (R–6) Offered intermittently. Same as MCLG and FRCH 338 (FREN 338). An historical, aesthetic, and critical survey of the French cinema, from its beginnings in 1895 through the contemporary cinema (Muet, classical, Realism, Nouvelle Vogue, etc.) With an introduction to contemporary film criticism. Students taking the course for French credits are required to do research, reading, and writing in the French language.
- U 340H Ancient Greek Civilization and Culture 3 cr.** Offered intermittently. Prereq., ART 150H or 151H or consent of instr. Same as MCLG 360H and ART 380H. Slide lecture course. Ancient Greek works of art and architecture, related to and explained by contemporary ideas and values of Greek society.
- U 342 Topics in Comparative Literature and Religion 3 cr.** Offered every second semester. Same as SSEA 342. These courses compare major traditions, texts and trends in two or more world civilizations or cultures. Works of literature and/or philosophy are examined in their historical contexts, and in relation to each other.
- U 351L Exploring the Humanities in Depth 3 cr.** (R–9) Offered intermittently. Intensive study of a specific historical period in Western humanities through its seminal literature, with an emphasis on the intellectual and ethical paradigms which form an essential component of the foundations of the Western tradition.

U 356 Studies in Literature and Other Disciplines 3 cr. (R–9) Offered autumn and spring. Prereq., nine credits in LIT or LS or consent of instr. Same as LIT 376 (ENLT 325). Selected works of literature studied in conjunction with works of art, music, religion, philosophy, or another discipline (every two years, Psychology and Literature, Film and Literature, The Poetry of Meditation; less frequently, British Art and Literature, Modernism, Literature and Science, Bible as Literature, Song).

U 358 Latin American Civilization through Literature and Film 3 cr. Offered autumn odd-numbered years. The development of the traditional society of Latin American civilization through the interaction of European, Indian and African elements. Credit not allowed for both LS/MCLG 358 and SPNS 357 (SPAN 359).

U 362 Ancient Greek and Roman Philosophy 3 cr. Offered intermittently. Same as MCLG 362 and PHL 363 (PHIL 362). Examination of the thought of the philosophers of Greece and Rome as expressed in original works read in English translation. Ancient philosophy studied within its historical, linguistic and cultural setting.

U 368 Shakespeare: Comedy and Tragedy 3 cr. Offered yearly. An investigation of the differences, but also affinities, between the two fundamental Shakespearean genres.

U 381 Studies in the Film 3 cr. Offered autumn and spring. Same as ENFM 381L. Prereq., LS 180L or consent of instr. Same as MCLG 381. Studies in genres, directors, movements, problems, etc.

U 395 Special Topics Variable cr. (R–9) Offered intermittently. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

U 396 Independent Study Variable cr. (R–12) Offered intermittently.

U 397 Research Variable cr. (R–6) Offered intermittently.

U 398 Internship Variable cr. Offered intermittently. Prereq., consent of director. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

UG 428 Renaissance Debate on Women 3 cr. Offered yearly. A reading of texts from the fourteenth to the seventeenth centuries in several different genres (prose pamphlets, lectures, lyrics, drama, extracts from epics), to examine the arguments presented by women and men that crucially shaped the debate on women and gender and influenced modern attitudes toward women in the western hemisphere.

UG 432 Twentieth Century Chinese Fiction in English Translation 3 cr. Offered intermittently in spring. Same as CHIN, and MCLG 432. A survey of the principal works of Chinese fiction circa 1910–1990.

UG 455 Studies in Comparative Literature 3 cr. (R–9) Offered intermittently. Same as LIT 430 (ENLT 430) and MCLG 440. Study of important literary ideas, genres, trends and movements. Credit not allowed for more than one course on the same topic numbered LIT 430 (ENLT 430), MCLG 440, 494 or LS 455.

UG 460 History of Criticism and Theory 3 cr. Offered autumn or spring. Prereq., LIT 300 (ENLT 301) and six credits in literature courses numbered 300 or higher. Same as LIT 420 (ENLT 420). A survey of the historical development of critical theories which shaped ways of reading and writing from Plato and Aristotle to the present.

UG 461 Topics in Critical Theory 3 cr. (R–6) Offered autumn or spring. Prereq., LIT 300 (ENLT 301) and six credits in literature courses numbered 300 or higher. Same as LIT 420 (ENLT 421). Study and application of one or more theoretical approaches to interpreting texts (e.g., aesthetic poststructural, new historicist, classical, renaissance, romantic, narrative, psychoanalytic, formalist, neo-Marxist, feminist, gender, cultural studies and reader-response theory.)

UG 494 Seminar in Humanities: Genres and Periods 3 cr. (R–9) Offered intermittently. Concentrated studies in specific genres and periods.

UG 495 Special Topics Variable cr. (R–9) Offered intermittently. Experimental offerings of visiting professors, experimental

offerings of new courses, or one–time offerings of current topics.

U 496 Independent Study Variable cr. (R–9) Offered intermittently.

U 497 Research Variable cr. (R–6) Offered intermittently.

U 498 Internship Variable cr. Offered intermittently. Prereq., consent of director. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

Faculty

Professors

Paul A. Dietrich, Ph.D., University of Chicago, 1984

Stewart Justman, Ph.D., Columbia University, 1976

Ruth Vanita, Ph.D., Delhi University, 1992

Associate Professors

Bradley Clough, Ph.D., Columbia University, 1998

Nathaniel Levtow, Ph.D., Brown University, 2006

Lecturer

Mark Hanson, Ph.D., University of Virginia, 1993

Linguistics

- Courses
- Faculty

Irene Appelbaum, Director

Mission

Objectives. The Linguistics Program aims to train students in the scientific analysis of language. Students are prepared to pursue further graduate study in the field; study other languages; apply their understanding of language to other fields including teaching English and other languages to non–native learners of those languages.

Indigenous and Endangered Languages. The research focus of the Program includes Indigenous languages of North America. Montana is the aboriginal home of speakers of languages belonging to four distinct families: 1. Salish (Flathead); 2. Algonquian (Cree, Blackfoot, Northern Cheyenne, and Gros Ventre); 3. Siouan (Assiniboine, Sioux and Crow); and 4. Kootenai, a language isolate. The Linguistics Program is committed to preserving and promoting the linguistic diversity of the region and the state.

Interdisciplinary. The Linguistics Program is situated within the Department of Anthropology. In offering its curriculum the Linguistics Program collaborates with Communication Studies, Communicative Sciences and Disorders, English, Modern and Classical Languages and Literatures, Native American Studies, and Philosophy.

Degrees Offered

- **Graduate Program.** The Program offers an M.A. degree in Linguistics. Students may also pursue an M.A. degree with a Linguistics Specialization through the Department of Anthropology.
- **Undergraduate Program.** The Program offers a minor in Linguistics. Students majoring in any discipline including,

but not limited to, the following fields will find linguistics courses to be a highly valuable addition to their major course of study: Biology, Communication Studies, Communicative Science and Disorders, Computer Science, Education, English, Modern and Classical Languages and Literatures, Native American Studies, and Psychology. Earning a minor in Linguistics requires completion of 18 credits. Students must complete the following requirements beyond their major degree requirements:

- i. 3 credits: LING 470;
- ii. 6 credits (2 of the following 3 courses): LING 471, LING 472, LING 489; and
- iii. 9 credits (3 elective courses from among the following): LING 270S*, LING 375X, LING 465*, LING 466, LING 471**, LING 472**, LING 473, LING 474, LING 475, LING 477, LING 478, LING 484, LING 489**.

* Cannot be taken after taking 470 or other courses marked with an asterisk. Only one of 270S and 465 may be counted towards the minor.

** May be taken as an elective, only if not taken as a required course under ii. above.

A major in Linguistics is not currently offered.

Students may also pursue a Linguistics Option while earning a B.A. degree through the following departments: Anthropology, English, and Modern and Classical Languages and Literature (French). For specific course requirements, students should refer to the relevant department's section in this catalog.

· **Certificate of Accomplishment in English as a Second Language.** The University offers a sequence of courses (22 credits) leading to a Certificate of Accomplishment in English as a Second Language. The Certificate is issued by the University upon the recommendation of the Linguistics Program and the Faculty Senate.

In order to earn this Certificate, a student must hold, or simultaneously earn, a B.A. or higher degree and complete the following requirements:

- i. 12 credits: LING 470; LING 471; LING 472; LING 477 or LING 478
- ii. 6 credits (2 upper-division elective courses from among the following): LING 466, LING 473, LING 475, LING 476, and LING 489;
- iii. 3 credits: LING 480; and
- iv. 1 credit: LING 491.

Courses taken for Certificate credit may not be taken on a credit/no credit basis (except 491).

· **English as a Second Language/Academic English (EASL).** Outside of its curriculum, the Linguistics Program directs several EASL courses for international students whose TOEFL scores range between 500 and 580. EASL courses enhance learning second-language English as the language of classroom instruction at an English-speaking university or college. These courses facilitate the transition from learning English to using English in academic settings. Course content concentrates on academic uses of language skills: reading, writing, speaking and listening, with a limited amount of intensive activity involving grammar and/or pronunciation.

Trained, supervised Graduate Assistants instruct EASL courses. Each EASL course lasts one semester and grants international students three credit hours toward graduation.

· **Teacher Preparation in English as a Second Language Minor Teaching Field:** For an endorsement in the Minor Teaching Field of English as a Second Language, a student must complete LING 470, LING 471, LING 472, LING 477 or LING 478, LING 480 and LING 491 (for three credits); at least two courses from the following: LING 466, 473, 475, 476, and 489. Students also must gain admission to the Teacher Education Program and meet the requirements for teaching licensure (see College of Education section of this catalog). Courses taken for the Teaching Minor may not be taken on a credit/no credit basis.

Courses

U = for undergraduate credit only, UG = for undergraduate or graduate credit, G = for graduate credit. R after the credit indicates the course may be repeated for credit to the maximum indicated after the R. Credits beyond this maximum do not count toward a degree.

Linguistics (LING)

U 173 Introduction to Language 3 cr. Offered intermittently. Same as COMM 173. A survey of the elements of language (structure, meaning, and sound) including language use in its social and cultural context.

U 195 Special Topics Variable cr. (R–6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one–time offerings of current topics.

U 198 Internship Variable cr. Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

U 270S Introduction to Linguistics 3 cr. Offered autumn and spring. An introduction to the field of modern linguistics and to the nature of language. Emphasis on the ways different cultures develop symbol systems for representing meaning.

U 375X Endangered Languages 3 cr. Offered intermittently. Survey of endangered languages and the communities in which those endangered languages are spoken. Topics to be addressed include linguistic diversity, language endangerment, language shift and loss, language maintenance efforts, and prospects for the future of these languages.

U 395 Special Topics Variable cr. (R–9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one–time offerings of current topics.

U 398 Internship Variable cr. Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298, 398, 498) may count toward graduation.

UG 465 Structure and History of English for Teachers 3 cr. Offered autumn and spring. Same as ENLI 465. The development of the English language from a historical perspective contrasted with the phonological and grammatical structure of English from a modern linguistic point of view; specifically designed for teachers.

UG 466 Pedagogical Grammar 3 cr. Offered autumn. Prereq., LING 470. Discussion of English grammar from a non–native speaker perspective focusing on items and structures that are difficult for non–native speakers.

UG 470 Linguistic Analysis 3 cr. Offered autumn and spring. An in–depth examination of the formal properties of language, concentrating on the core areas of linguistic analysis (phonetics, phonology, morphology, syntax and semantics).

U 471 Phonetics and Phonology 3 cr. Offered autumn. Prereq., LING 470. A study of phonetic and phonological systems from as many as 20 languages, most of them non–Indo–European; training in how to do linguistic analysis as well as linguistic theory.

UG 472 Generative Syntax 3 cr. Offered autumn. Prereq., LING 470. A study of the human language sentence–formation system, the means for expressing semantic information as propositional content. Emphasis on the abstraction of utterances in the form of mathematical objects.

U 473 Language and Culture 3 cr. Offered autumn even–numbered years. Prereq., LING 470. Technical study of the relationships between grammatical categories and world view.

U 474 Historical Linguistics 3 cr. Offered spring. Prereq., LING 470. An introduction to the study of language change

over time. Topics include: methods for studying language change (the comparative method and internal reconstruction); types of language change (sound change, borrowing, analogical change, lexical, syntactic, and semantic change); and explanations for language change. The principles of historical reconstruction and comparative method in the analysis of linguistic variation and change.

U 475 Linguistic Field Methods 3 cr. Offered spring odd-numbered years. Prereq., LING 470. Writing up linguistic data; developing techniques for eliciting linguistic data by working with a native speaker of a less commonly taught language.

UG 476 Child Language Acquisition 3 cr. Offered spring even-numbered years. Prereq., LING 470. The development of speech and language: phonologic, prosodic, semantic, pragmatic, and morphosyntactic systems.

UG 477 Bilingualism 3 cr. Offered autumn odd-numbered years. Prereq., LING 270S or equiv. Societal and individual bilingualism: topics include language policy, maintenance, interference, code-switching and mixing, and bilingual education.

UG 478 Second Language Development 3 cr. Offered spring. Prereq., LING 471 and 472 or consent of instructor. Like studies in Second Language (L2) Acquisition, this course considers Interlanguage (i.e., a language system that develops non-natively) and includes analysis of L2 data taken from naturalistic and experimental setting.

UG 479 Pragmatics 3 cr. Offered intermittently. Prereq., LING 270 or equiv. Relations between language and its interpreters focusing on presupposition, speech acts, discourse analysis, and the application of pragmatics to second and foreign language acquisition.

UG 480 Teaching English as a Foreign Language 3 cr. Offered spring. Prereq., LING 270 or equiv. Same as ENLI 480. The application of principles of modern linguistics to the problems of teaching English as a foreign language.

UG 481 The ESL Professional 3 cr. Offered spring. Prereq. or coreq., LING 491; prereq., LING 480 or consent of instr. Professional development techniques for the independent language teacher: language test construction, self-critique of teaching strategies, materials development, curriculum evaluation and design, and electronic and print media resources for the language teaching professional.

UG 482 Topics in the Philosophy of Language 3 cr. (R-6) Offered Intermittently. Prereq., upper-division standing. Same as PHL 406 (PHIL 471). Discussion of one or more of the following topics: theories of meaning, theories of reference, pragmatics, the origin of language, psycholinguistics, and foundations of linguistic theory.

U 484 North American Indigenous Languages and Linguistics 3 cr. Offered spring even-numbered years. Prereq. LING 470. Description and analysis of grammatical features of Indigenous languages of North America.

U 489 Morphology 3 cr. Offered spring. Prereq., LING 470. A survey of the morphological features of several unrelated languages to provide the student with a broad overview of how languages compare and contrast.

UG 491 ESL Practicum 1- 3 cr. Offered autumn and spring. Prereq., or coreq., LING 480. Offered every term. Same as ENLI 491. Students with a teaching major take the course for 3 credits; others take it for 1 credit and do one third of the work.

UG 495 Special Topics Variable cr. (R-6) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one-time offerings of current topics.

UG 496 Independent Study Variable cr. (R-9) Offered autumn and spring. Prereq., consent of instr. Special projects in linguistic analysis.

U 498 Internship Variable cr. Offered autumn and spring. Prereq., consent of department. Extended classroom experience which provides practical application of classroom learning during placements off campus. Prior approval must be obtained from the faculty supervisor and the Internship Services office. A maximum of 6 credits of Internship (198, 298,

398, 498) may count toward graduation.

G 559 Preceptorship 1 cr. (R–4) Offered autumn and spring. Prereq., consent of instr. Materials development, assessment and evaluation of learners' needs and interests in teaching English as an academic second Language to international students attending universities with English instruction.

G 570 Seminar in Linguistics 3 cr. (R–12) Offered autumn and spring. Advanced topics in linguistic analysis.

G 571 Phonetics and Phonology 3 cr. Offered autumn. A study of phonetic and phonological systems from as many as 20 languages, most of them non–Indo–European; training in how to do linguistic analysis as well as linguistic theory. This course co-convenes with LING 471. Graduate students taking LING 571 will complete additional requirements and their work will be of a more advanced nature.

G 573 Language and Culture 3 cr. Offered autumn even–numbered years. Technical study of the relationships between grammatical categories and world view. Co-convenes with LING 473. Graduate students will complete additional requirements and their work will be of a more advanced nature.

G 574 Historical Linguistics 3 cr. Offered every year. An introduction to the study of language change over time. Topics include: methods for studying language change (the comparative method and internal reconstruction); types of language change (sound change, borrowing, analogical change, lexical, syntactic, and semantic change); and explanations for language change. The principles of historical reconstruction and comparative method in the analysis of linguistic variation and change. Co-convenes with LING 474. Graduate students will complete additional requirements and their work will be of a more advanced nature.

G 575 Linguistic Field Methods 3 cr. Offered spring odd-numbered years. Writing up linguistic data; developing techniques for eliciting linguistic data by working with a native speaker of a less commonly taught language. Co-convenes with LING 475. Graduate students will complete additional requirements and their work will be of a more advanced nature.

G 584 North American Indigenous Languages and Linguistics 3 cr. Offered intermittently. Description and analysis of grammatical features of Indigenous languages of North America. Co-convenes with LING 484. Graduate students will complete additional requirements and their work will be of a more advanced nature.

G 589 Morphology 3 cr. Offered spring. A survey of the morphological features of several unrelated languages to provide the student with a broad overview of how languages compare and contrast. This course co-convenes with LING 489. Graduate students taking LING 589 will complete additional requirements and their work will be of a more advanced nature.

G 595 Special Topics Variable cr. (R–9) Offered autumn and spring. Experimental offerings of visiting professors, experimental offerings of new courses, or one–time offerings of current topics.

G 596 S Independent Study 1–3 cr. (R–6) Offered autumn and spring.

G 598 Internship Variable cr. (R–6) Offered autumn and spring.

G 599 Professional Paper Variable cr. (R–6) Offered autumn and spring.

G 699 Thesis Variable cr. (R–6) Offered autumn and spring.

English as a Second Language (EASL)

U 250 Intermediate English for Academic Purposes: I 3 cr. (R-6) Offered autumn and spring. Extensive training in reading, writing, and speaking grammatical English. This course is required of all foreign students with TOEFL scores between 500 and 525. Grading A, B, C, D, or F.

U 251 Intermediate English for Academic Purposes: II 3 cr. (R-6) Offered autumn and spring. Prereq., 500 to 525 on the TOEFL or consent of instr. English grammar, reading, writing, and conversation skills for students who are not native

speaker of English; designed for students who have scored between 500 and 525 on the TOEFL. Grading A, B, C, D, or F.

U 450 Advanced English for Academic Purposes: I 3 cr. Offered autumn and spring. Prereq., TOEFL score of 526 or greater and consent of instr. Extensive training in reading, writing, and speaking grammatical English. Grading A, B, C, D, or F.

U 451 Advanced English for Academic Purposes: II 3 cr. Offered autumn and spring. Prereq., 526 to 580 on the TOEFL or consent of instr. English grammar, reading, writing, and conversation skills for students who are not native speakers of English; designed for students who have scored between 525 and 580 on the TOEFL. Grading A, B, C, D, or F.

Linguistics Program Faculty

Irene Appelbaum, Ph.D., University of Chicago, 1995, Associate Professor, Director

Leora Barel, Ph.D., University of British Columbia, 2005, Assistant Professor

Mizuki Miyashita, Ph.D., University of Arizona, 2002, Associate Professor

Tully J. Thibeau, Ph.D., University of Arizona, 1999, Associate Professor

Affiliated Faculty

Naomi Shin, Ph.D., City University of New York, 2006, Assistant Professor (Modern and Classical Languages and Literatures)

Adjunct Faculty

Jeanie Castillo, M.A., California State University, Fresno, 1998

Laura Felton Rosulek, Ph.D., University of Illinois at Urbana-Champaign, 2009

Department of Mathematical Sciences

- Special Degree Requirements
- Suggested Course of Study
- Courses
- Faculty

[This section of the catalog was edited after the catalog was published. Updated November 14, 2012.](#)

Leonid Kalachev, Chair

Mathematics is studied both as a tool and for its own sake. Its usefulness in the sciences - physical, biological, social, behavioral, and environmental - and in decision-making processes is so established as to make it an indispensable part of many curricula.

Mathematics is chosen as a major area of study by individuals who find it challenging, fascinating, and beautiful. It is also appreciated by many who seek primarily to use mathematics as a tool.

A career in mathematics, except for teaching at the secondary level, generally requires a graduate degree as preparation. Careers include teaching, research, and the application of mathematics to diverse problems in institutions of higher learning, business, industry, and government.

The Bachelor of Arts, Master of Arts, and Doctor of Philosophy degrees are offered as well as a Bachelor of Science in Mathematical Sciences–Computer Science.

High School Preparation: For studying mathematics at the university level, it is recommended that the high school course work consist of four years of college-preparatory mathematics, including geometry, trigonometry, and college algebra or precalculus. A course in calculus or statistics is helpful, but not necessary. It is unusual to complete an undergraduate degree in mathematics in four years without the necessary background to take Calculus I (M 171) during the freshman year (preferably during the first semester at the university).

Special Degree Requirements

Refer to graduation requirements listed previously in the catalog. See index.

Mathematics Requirements for B.A. Degree with a Major in Mathematical Sciences

To obtain a B.A. degree with a major in Mathematical Sciences, the required courses are M 171 or 181, 172 or 182 (MATH 152, 153), M 210 (except for students in the Mathematics Education option), M 221 (MATH 221), M 273 (MATH 251) (except for students in the Mathematics Education option), M 300 (MATH 300) (except for students in the Mathematics Education option), M 307 (MATH 305) and six additional courses from the following list (at least three of the six must be numbered 400 or above): M 301, 311, 325, 326, 361, 362, 381, 412, 414, 429, 431, 432, 439, 440, 445, 472, 473, 485 and STAT 341, 421, 422 (MATH 301, 311, 325, 326, 341, 351, 381, 382, 406, 412, 414, 421, 422, 431, 441, 442, 451, 452, 471, 475, 485). Four of the seven required 3- or 4-credit upper-division mathematical sciences courses must be taken from UM-Missoula. All mathematical sciences courses counted toward the major must be passed with a grade of C– or better and a 2.00 grade point average is required for these courses. In addition, if a special option is desired, the minimum requirements listed below for that option must be met. Additional courses should be chosen in consultation with a mathematics advisor.

Requirements for the Special Options

Applied Mathematics Option

M 311, 412, 414 (MATH 311, 412, 414) and one of M 440 or 472 (MATH 452 or 471). (M 381 and M485 (MATH 485) are recommended.)

Combinatorics and Optimization Option

M 361, 362, 485 (MATH 381, 382, 485); and one course chosen from STAT 341 (MATH 341), M 414, 440 (MATH 414, 471), or CSCI 332 (CS 332).

Mathematics Education Option

M 301, 326, 429, 431, 439 (MATH 301, 326, 406, 421, 431), and STAT 341 (MATH 341); either M 273 (MATH 251) or one additional course chosen from the above list for the six-course requirement; and the completion of licensure requirements for teaching in secondary schools to include C&I 430.

Pure Mathematics Option

Four courses chosen from M 381, M431, 432, 472, 473 (MATH 421, 422, 451, 452).

Statistics Option

STAT 341, 421, 422 (MATH 341, 441, 442). (Additional mathematics and statistics courses chosen with advisor.)

Major Requirements in Courses Outside Mathematics

1. Except for students in the Mathematics Education option and for students presenting a second major within the University, students must either complete a two-semester language sequence as specified under "Group III: Modern and Classical Languages" in the General Education section of the Catalog, or take one course chosen from CSCI 100, 135, 136 (CS 101, 131, 132).
2. All mathematics majors, except those selecting the mathematics education option, must complete 18 credits in at most three sciences selected from astronomy, biology, chemistry, computer science, economics, forestry,

geosciences, and physics. Students selecting the mathematics education option must complete 12 credits in at most two sciences selected from astronomy, biology, chemistry, computer science, geosciences, and physics. (Note that 'biology' includes all courses with prefixes BIOL, MICB, BIOB, BIOE, BIOH, BIOM, and BIOO.) An alternative to the science requirement is for the student to present a minor or second major within the University, or for the student with a mathematics education option to complete an additional teaching minor or major.

3. The upper-division writing requirement for Mathematical Sciences majors consists of: M 429 (MATH 406), or any other approved General Education upper-division Writing course, or a senior thesis (M 499 (MATH 499)).

Requirements for a B.S. Degree with a Combined Major in Mathematical Sciences–Computer Science

The purpose for the combined program is to provide a thorough background in both allied disciplines and to inculcate a deeper understanding of their goals and methods. A student must complete 60 credits in the two disciplines: 30 of these credits in mathematical sciences courses and 30 of these credits in computer science courses. A minimum grade of "C–" and a 2.0 grade point average is required in all courses which follow.

The mathematical sciences requirements are: M 171 (or 181), 172 (or 182), 221, 273, 307 (or 225) (MATH 152, 153, 221, 251, 305 (or 225)), and twelve credits of mathematical sciences electives selected from the following list: M 311, 325, 326, 361, 362, 381, 412, 414, 429, 431, 432, 439, 440, 445, 472, 473, 485 and STAT 341, 421, 422, 451, 452 (MATH 311, 325, 326, 341, 351, 381, 382, 406, 412, 414, 421, 422, 431, 441, 442, 444, 445, 451, 452, 471, 475, 485).

The computer science requirements are: CSCI 106, 135-136 or 137, 205, 232, 332, 361 (CS 121, 131–132 or 133, 242, 241, 332, 281) and nine credits of CSCI (CS) electives selected from courses numbered 300 and above. A total of at most three of the nine credits of CSCI (CS) electives may be in CSCI 398 or 498 (CS 398 or 498).

The combined nine additional credits of computer science electives and twelve additional credits of mathematical sciences electives must include at least three 3– or 4–credit courses numbered 400 or above, with at least one chosen from each department (not including M 429 (MATH 406) and STAT 451, 452 (MATH 444 and 445)).

Other requirements are: One of the sequences BIOB 160N, 170N, 171N (BIOL 110N, 108N, 109N); CHMY 141N, 143N (CHEM 161N, 162N); or PHSX 215N-218N (PHYS 211N–214N). In addition, WRIT 222 (FOR 220), and either COMM 111A or COMM 242.

Each student plans a program in consultation with a computer science and a mathematical sciences advisor. Students planning to attend graduate school in computer science or the mathematical sciences should consult with their respective advisors.

The upper-division writing requirement is one of the following: CSCI 315E (CS 415E), M 429 (MATH 406), any other approved General Education upper-division writing course, or a senior thesis (CSCI 499 (CS 499) or M 499 (MATH 499)).

Suggested Curricula:

Applied Math–Scientific Programming: M 311, 412, 414 (MATH 311, 412, 414), and one course chosen from STAT 341 (MATH 341), M 381, M 473, 472, 440 (MATH 451, 452, 471). Three courses chosen from CSCI 460, 441, 477, 444 (CS 344, 446, 477, 486).

Combinatorics and Optimization–Artificial Intelligence: M 361, 362 (MATH 381, 382), and two courses chosen from M 325, 414, 485 (MATH 325, 414, 485) and STAT 341 (MATH 341); and CSCI 460, 446, and 447 (CS 344, 455, and 457).

Statistics–Machine Learning: STAT 341, 421 (MATH 341, 441), and two courses chosen from M 325, 362, 485 (MATH 325, 382, 485) and STAT 422 (MATH 442). Three courses chosen from CSCI 340, 446, 447, 451, and 444 (CS 365, 455, 457, 458, and 486).

Algebra–Analysis: M 381, M 431 (MATH 421), and two courses chosen from M 326, 432, 473, 472 (MATH 326, 422, 451, 452); CSCI 460, 426 (CS 344, 441), and one other course.

Suggested Course of Study

First Year

A S

M 171-172 or 181-182 (MATH 152-153) Calculus I, II or Honors Calculus I, II	4	4
M 210 Introduction to Mathematical Software	-	3
WRIT 101 (ENEX 101) Composition and other General Education Courses (including two sciences courses)	12	9
	16	16
Second Year	A	S
M 221 (MATH 221) Introduction to Linear Algebra	4	-
M 273 (MATH 251) Multivariable Calculus	4	-
M 307 (MATH 305) Introduction to Abstract Mathematics	-	3
General Education courses, additional science courses and electives	9	13
	17	16

Requirements for a Minor

To earn a minor in mathematics the student must earn 23 credits in M, MATH, or STAT courses listed in a UM-Missoula Catalog (or in transfer courses equivalent to such courses). M courses must be numbered 115 or higher, and MATH courses must be numbered 111 or higher. Courses must include: (a) one of M 162 or 172 or 182 (MATH 150 or 153), and (b) at least three 3- or 4- credit courses at the 300 level or above. M 172 or 182 (MATH 153) (Calculus II) is recommended since it is a prerequisite for many upper-division mathematics courses. All courses counted toward the minor must be passed with a grade of C- or better and a 2.00 grade point average is required for these courses. A handout with detailed advice for math minors, including suggested curricula, is available on the math department's home page.

Mathematics Education Minor: For a teaching minor endorsement in the field of mathematics, a student must complete M 171-172, 221, 301, 307, 326, 439 (MATH 152-153, 221, 301, 305, 326, 431), and STAT 341 (MATH 341). Students also must complete C&I 430, gain admission to Teacher Education Programs and meet the requirements for teaching licensure (see the Department of Curriculum and Instruction section of this catalog). All courses counted toward the minor must be passed with a letter grade of C- or better.

Courses

U = for undergraduate credit only, UG = for undergraduate or graduate credit, G = for graduate credit. R after the credit indicates the course may be repeated for credit to the maximum indicated after the R. Credits beyond this maximum do not count toward a degree.

Mathematics (M)

Unless the student has prior written approval of the Mathematical Sciences Department, credit is not allowed for any mathematics course that is a prerequisite for a mathematics course for which credit has already been earned. Students receiving transfer or Advanced Placement credit for STAT 216 (MATH 241) may take M 115 (MATH 117) for credit. See the College of Technology section for Introductory Algebra, M 090 (MAT 005), and Intermediate Algebra, M 095 (MAT 100).

U 104 (MATH 109) Numbers as News 3 cr. Offered spring. Prereq., M 090 (MAT 005) with a grade of B- or better, or M 095 (MAT 100), or ALEKS placement ≥ 3 . An exploration of mathematics and statistics as used in the popular media. For students in the School of Journalism only.

U 105 (MATH 107) Contemporary Mathematics 3 cr. Offered every term. Prereq., M 090 (MAT 005) with a grade of B- or better, or M 095 (MAT 100), or ALEKS placement ≥ 3 . An introduction to mathematical ideas and their impact on society. Intended for students wishing to satisfy the general education mathematics requirement.

U 115 (MATH 117; MAT 117) Probability and Linear Mathematics 3 cr. Offered every term. Prereq., M 090 (MAT 005) with a grade of B- or better, or M 095 (MAT 100), or ALEKS placement ≥ 3 . Systems of linear equations and matrix algebra. Introduction to probability with emphasis on models and probabilistic reasoning. Examples of applications of the material in many fields.

U 121 (MATH 111) College Algebra 3 cr. Offered autumn and spring. Prereq., M 095 (MAT 100) or ALEKS placement ≥ 4 . Intended to strengthen algebra skills. The study of functions and their inverses; polynomial,

rational, exponential, and logarithmic functions. Credit not allowed for both M 121 (MATH 111, MAT 118), and M 151 (MATH 121, MAT 120).

U 122 (MATH 112) College Trigonometry 3 cr. Offered autumn and spring. Prereq., M 121 (MATH 111) or ALEKS placement ≥ 4 . Preparation for calculus based on college algebra. Review of functions and their inverses, exponential and logarithmic functions. Trigonometric functions and identities, polar coordinates and an optional topic such as conic sections or parametric functions. Credit not allowed for both M 122 (MATH 112, MAT 119) and M 151 (MATH 121, MAT 120).

U 135 (MATH 130) Mathematics for K-8 Teachers I 5 cr. Offered autumn and spring. Prereq., M 095 (MAT 100) or ALEKS placement ≥ 4 . Open only to elementary education majors. Topics include problem-solving, sets and logic, functions, whole numbers, integers, rational numbers, real numbers, number theory, probability and statistics.

U 136 (MATH 131) Mathematics for K-8 Teachers II 4 cr. Offered autumn and spring. Prereq., M 135 (MATH 130). Topics include introductory geometry, geometric constructions, congruence, similarity, measurement, coordinate geometry and an introduction to computer geometry.

U 151 (MATH 121) Precalculus 4 cr. Offered autumn and spring. Prereq., ALEKS placement ≥ 4 . A one semester preparation for calculus (as an alternative to M 121-122 (MATH 111–112)). Functions of one real variable are introduced in general and then applied to the usual elementary functions, namely polynomial and rational functions, exponential and logarithmic functions, trigonometric functions, and miscellaneous others. Inverse functions, polar coordinates and trigonometric identities are included. Credit not allowed for both M 151 (MATH 121, MAT 120) and M 121 or 122 (MATH 111 or 112, MAT 118 or 119).

U 162 (MATH 150) Applied Calculus 4 cr. Offered autumn and spring. Prereq., ALEKS placement ≥ 5 or one of M 121, 122 or 151 (MATH 111, 112 or 121). Introductory course surveying the principal ideas of differential and integral calculus with emphasis on applications and computer software. Mathematical modeling in discrete and continuous settings. Intended primarily for students who do not plan to take higher calculus.

U 171 (MATH 152) Calculus I 4 cr. Offered autumn and spring. Prereq., M 122 or 151 (MATH 112 or 121) or ALEKS placement ≥ 5 . Differential calculus, including limits, continuous functions, Intermediate Value Theorem, tangents, linear approximation, inverse functions, implicit differentiation, extreme values and the Mean Value Theorem. Integral Calculus including antiderivatives, definite integrals, and the Fundamental Theorem of Calculus.

U 172 (MATH 153) Calculus II 4 cr. Offered autumn and spring. Prereq., M 171 (MATH 152). Techniques of Integration. Area computations. Improper integrals. Infinite series and various convergence tests. Power series. Taylor's Formula. Polar coordinates. Parametric curves.

U 181 Honors Calculus I 4 cr. Offered autumn. Prereq., consent of instr. Coreq., Honors Calculus Seminar, a section of M 294 (MATH 294). Honors version of M 171 (MATH 152).

U 182 Honors Calculus II 4 cr. Offered spring. Prereq., M 181 or consent of instr. Coreq., Honors Calculus Seminar, a section of M 294 (MATH 294). Honors version of M 172 (MATH 153).

U 191 (MATH 95) Special Topics Variable cr. (R–6) Offered autumn and spring. Prereq., consent of instr. Experimental offerings of visiting professors, experimental offerings of new courses, or one–time offerings of current topics.

U 210 Introduction to Mathematical Software 3 cr. Offered spring. Prereq., M 162 or 171 (MATH 150 or 152), or consent of instr. Software packages useful for doing and writing mathematics. Introduction to a computer algebra system (such as Maple or Mathematica), a numerical package (such as MATLAB or R), and elementary programming. Writing and communicating mathematics using the mathematical typesetting system LaTeX.

U 221 Introduction to Linear Algebra 4 cr. Offered autumn and spring. Prereq., M 172 (MATH 153). Vectors in the plane and space, systems of linear equations and Gauss–Jordan elimination, matrices, determinants, eigenvalues and eigenvectors, vector spaces, linear transformations. Calculators and/or computers used where appropriate.