Classes James Madison University 2012-2013 Undergraduate Catalog

Courses

Group 1. Introduction to Environmental Science ³
- BIO 124. Ecology and Evolution
- GEOL 102. Environmental: Earth
- GEOL 115. Earth Systems and Climate Change
- GSAT 112. Environmental Issues in Science and Technology
- GEOG 210. Physical Geography

Group 2. Advanced Environmental Science courses
- BIO 354. Global Climate and Life
- BIO/GEOL 400. Geology and Ecology of the Bahamas
- BIO/GEOL 402. Forest Ecology
- BIO 451. Ecological Systems
- BIO 452. Population Ecology
- BIO 453. Microbial Ecology and Evolution
- BIO 454. Introduction to Biometrics
- BIO 456. Landscape Ecology
- BIO 457. Biological Applications of GIS
- BIO 459. Freshwater Ecology
- BIO 465. Environmental Toxicology
- BIO 466. Toxicology Seminar
- CHEM 354. Environmental Chemistry Field Camp
- CHEM 355. Nuclear and Radiological Chemistry
- ENGR 431. Engineering Design I
- ENGR 432. Engineering Design II
- ENVT 200. Environmental Systems Theory
- GEOL 215. Geospatial Tools I – Cartography and GIS
- GEOL 216. Geospatial Tools II – Remote Sensing and GPS
- GEOL 290. Human Interaction with the Physical Environment
- GEOL 340. Biogeography
- GEOL 345. Cartography and Geospatial Visualization
- GEOL 366. Introduction to GIS
- GEOL 385. Principles of Remote Sensing
- GEOL 211. Introduction to Oceanography
- GEOL/GEOG 310. Environmental Impact
- GEOL 320. Meteorology
- GEOL 340. Environmental Soil Science
- GEOL 355. Geochemistry of Natural Waters
- GEOL 377. Earth Surface Processes
- GEOL 385. Geomorphology
- GEOL 410. Engineering Geology
- GEOL 460. Hydrogeology
- ISAT 311. Role of Energy in Modern Society
- ISAT 320. Fundamentals of Environmental Science & Technology I
- ISAT 321. Fundamentals of Environmental Science & Technology II
- ISAT 420. Environmental Analysis and Modeling
- ISAT 423. Environmental Remediation
- ISAT 425. Environmental Hydrology
- ISAT 427. Industrial Hygiene
- ISAT 429. Industrial Ecology
- MATH 321. Analysis of Variance and Experimental Design
- MATH 322. Applied Linear Regression
- MATH 324. Applied Nonparametric Statistics
- MATH 328. Time Series Analysis
- MATH/BIO 345E. Biometry
- MATH 421. Applied Multivariate Statistics
- PHYS 215. Energy and the Environment

Group 3. Environmental Studies courses

One of the following courses:
- ANTH 373. Anthropological Perspectives on Environment
- ECON 305. Environmental Economics
- ECON 340. Economics of Natural Resources
- ENG 371. Literature and the Environment
- GEOL 325. Environmental Ethics
- HIST 427. U.S. Environmental History
- ISAT 311. Role of Energy in Modern Society
- ISAT 421. Environmental Policy and Regulation
- SCOM 354. Communication, Environment and Environmentalism
- SOC 311. Sociology of the Environment

Group 4 – Capstone course
- ENVT 400. Capstone Seminar ²

The environmental studies minor provides an interdisciplinary education engaging socio-cultural, scientific and technical issues raised by the oft-conflicting needs and desires of globally interacting societies. Designed to complement any major, the goals of the environmental studies minor include:

- to help undergraduates develop an awareness of the cultural, political and scientific aspects of the world’s environmental problems.
- to better prepare students for further study at the graduate or professional school level and careers in the expanding field of environmental professions.

The minimum requirement for a minor in environmental studies is 24 credit hours taken from the four categories outlined. No more than three courses from a single subject (e.g., GEOL, ANTH, ENG, etc.) may count toward completion of the environmental studies minor. Students wishing to complete more than one of the environmental minors (environmental management, environmental science and environmental studies) may receive dual credit for the capstone course (ENVT 400), but may not receive dual credit for any other courses that might be shared by the minors.

Courses

Introduction to Environmental Literacy ¹
- ANTH 196. Biological Anthropology
- GEOG 103. Contemporary Biology
- ENG 221. Literature, Nature, Environment (this section only)
- ENV 200. Environmental Systems Theory
- GEOL 102. Environment: Earth
- GEOL 115. Earth Systems and Climate Change

Socio-Cultural Approaches to Environmental Studies ²
- ANTH 373. Anthropological Perspectives on Environment and Development
- ECON 305. Environmental Economics
- ECON 340. Economics of Natural Resources
- ENG 371. Literature and the Environment
- ENG 372. Eco-Criticism and Environmental Ethics
- GEOL 290. Human Interaction with the Physical Environment
- GEOG 300. Population Geography
- GEOG 310. Environmental Issues
- GEOG 311. Endangered Environments
- GEOG 320. Human Dimensions of Global Change
- GEOG 322. Agricultural Systems
- GEOG 325. Environmental Ethics
- GEOG 341. Wilderness Techniques
- GEOG 342. Management and Protection of Natural Resources
- GEOG 343. Wildlife Management
- GEOG 345. Geography of Poverty
- GEOG/ISAT 429. Sustainability: An Ecological Process
- GEOG 430. Geography of Crop Plants
- HIST 427. U.S. Environmental History
- ISAT 421. Environmental Policy and Regulation
- SCOM 354. Communication, Environment and Environmentalism
- SOC 311. Sociology of the Environment
- Approved special topics courses
- Approved internship programs
- Approved study abroad courses

Environmental Science Literacy ³
- BIO 451. Ecological System
- BIO 452. Population Ecology
- BIO 456. Landscape Ecology

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¹ Can be double-counted with General Education.
² All students must complete the capstone course ENVT 400. Students must have completed 15 hours of their environment minor in order to enroll in the capstone.
³ Requires approval by the environmental science minor coordinator.
BIO 457. Environmental Toxicology
BIO 459. Freshwater Ecology
GEOG 327. Climatology
GEOG 340. Biogeography
GEOL 211. Introduction to Oceanography
GEOL 310. Management of Marine Resources
GEOL 340. Soils and Land Use
ISAT 320. Fundamentals in Environmental Science

Senior Seminar Capstone Course
ENVT 400. Capstone Seminar

1 Minimum of three credit hours; can be double-counted with GenEd credits.
2 Minimum of 15 credit hours; only two courses with the same course subject may be taken.
3 Minimum of 3 credit hours

Family Studies
R. Ann Myers, Minor Adviser
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Website: http://www.jmu.edu/cisat/minors/family_issues.html

The cross disciplinary minor in family studies is designed for undergraduates seeking enhancement of their major, desiring to increase understanding of self and relationships, and seeking to make a positive contribution to society. A substantial knowledge of family-related issues, family processes, policies, laws, services and the interrelationship of families and societies will enhance majors in many fields including anthropology, early and middle education, health sciences, management, nursing, psychology, social work and sociology. The minor encourages students to make connections between their major field and family studies, thereby adding value to the major.

The family studies minor requires a minimum of 18 credit hours with no more than six credit hours in the student’s major. One introductory course is required: either FAM 133 or SOCI 276. One course must be selected from each of these areas: Families in society, family and intimate relationships, and human development in the family. An additional course must be selected from any of the three areas or from family studies electives. A capstone course, FAM 400, is also required. At least four courses in the minor, including the introductory course, must have been completed prior to enrolling in FAM 400.

Required Courses
Introductory course (choose one of the following): 3
FAM 133. Contemporary Family
SOCI 276. Sociology of the Family

Families in Society (choose one of the following): 3
ECON 306. Economics of Women and the Family 1
GERN/SOCI 280. Social Gerontology
HIST 466. The Family 1400-1800 1
SOCI 303. Sociology of Death and Dying 2
SOCI 337. Sociology of Gender
SOWK 338. Issues and Policies in Family Services
SOWK 342. Child Welfare Services

Family and Intimate Relationships (choose one of the following): 3
FAM 330. Family Relations 1
HTH 372. Human Sexuality 1
PSYC 275. Psychology of Human Intimacy
PSYC 450. Psychology of Child Abuse and Neglect 1, 3
SOWK 340. Violence in Families 4

Human Development in the Family (choose one of the following): 3
FAM 300. Child Development 1, 5
FAM 335. Parent-Child Relationships Across the Lifespan 1
PSYC 304. Death and Dying: Thanatology 1, 5
PSYC 385. Developmental Psychology 1, 3
PSYC 470. Psychology of the Young Adult 1
PSYC 475. Psychology of Adulthood 1
SOWK 387. Working with Teenagers

Cross Disciplinary Programs: Minors 113

Capstone
FAM 400. Family Issues and Applications 1

Additional family studies course
1 Minimum of one or more prerequisites.

Film Studies
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Website: http://smad.jmu.edu/minor.html

The minor in film studies is designed for students who wish to extend their critical understanding of visual communication and narrative form by studying how movies tell stories, convey information and influence audiences. Because the program is cross disciplinary, it examines films as both art and entertainment, bringing together the literary traditions of English and the communication perspectives of media arts and design. Together, the aim is to explore cinema’s pictorial "language," investigate its commercial consequences and evaluate its impact across cultures as a medium for enacting the human story.

A total of six credit hours may be double-counted between the minor and major. More information is available from the film studies adviser of the School of Media Arts and Design or the Department of English.

Required Courses
ENG 381. An Introduction to Film to 1960 3
SMAD 460. Movies and Society

Select no fewer than four courses from the following: 12
ENG 302. Special Topics (when topic is film)
ENG 382. An Introduction to Film Since 1960
ENG 383. Major Film Genres
ENG 384. Major Film Directors
ENG 412. Special Topic Seminars (when topic is film)
SMAD 371. Narrative Media Studies
SMAD 461. Movies as Art
SMAD 462. Documentary in Film and Television
SMAD 463. Film Adaptations
SMAD 498. Senior Seminar (when topic is film)

Gerontology
Dr. B. J. Bryson, Minor Adviser
Phone: (540) 568-6980 Email: byrsonbj@jmu.edu
Website: http://www.jmu.edu/socwork/gerontology.html

The cross disciplinary minor in gerontology is designed for any undergraduate major desiring a concentration of study in gerontology for personal understanding or career preparation.

Required Courses
GERN/SOCI 280. Social Gerontology
GERN 305. Programs and Services for the Elderly 1
GERN 400. Skills and Techniques 1
GERN 495. Field Experience/Seminar 1

Major elective (a course supporting the student’s major or related field of study with 50 percent of the course content in gerontology) 5

1 Course has one or more prerequisites.
2 May not also take PSYC 365 in the minor.
3 May not also take SOWK 340 in the minor.
4 May not also take PSYC 450 in the minor.
5 May not also take SOC 363 in the minor.
6 May not also take PSYC 385 in the minor.
7 May not also take FAM 300 in the minor.

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