Course Lists for GPES Areas of Study

**Note for All Course Lists:** students may select from appropriate courses that become available or are not listed below if given approval by steering committee.

1. Applied Social Science List

   **Relevant to all Areas of Study**
   - ESF courses
     - EFB 522 Biophysical Economics
     - EST 550 Environmental Impact Analysis
     - EST 600 Foundations of Environmental Studies
     - EST 606 Environmental Risk Perception
     - EST 608 Environmental Advocacy Campaigns and Conflict Resolution
     - EST 612 Environmental Policy and Governance
     - EST 625 Wetland Management Policy
     - EST 626 Concepts and Principles of Sustainable Development
     - EST 628 Great Lakes Policy and Management
     - EST 635 Public Participation and Decision Making
     - EST 640 Environmental Thought and Ethics
     - EST 650 Environmental Perception and Human Behavior
     - EST 696 Nature, Recreation and Society
     - FOR 665 Natural Resources and Environmental Policy
     - FOR 670 Resource and Environmental Economics
     - FOR 687 Environmental Law and Policy
     - FOR 685 Business and Managerial Law
     - FOR 753 Advanced Natural Resource and Environmental Policy
   - SU courses – depends upon interest of the student and steering committee

2. Research Methods/Tools

   - ESF courses
     - APM 510 Statistical Analysis
     - APM 595 Probability and Statistics for Engineers
     - APM 620 Experimental Design and ANOVA
     - APM 625 Sampling Methods
     - APM 630 Regression Analysis
     - APM 635 Multivariate Statistical Methods
     - APM 645 Nonparametric Statistics and Categorical Data Analysis
     - ENS 519 Spatial Ecology
     - ERE 530 Numerical and Computing Methods
     - ERE 551 GIS for Engineers
     - ERE 621 Spatial Analysis
     - ERE 622 Digital Image Analysis
     - ERE 645 Hydrologic Modeling
ERE 665 Environmental Systems Engineering
EST 603 Research Methods and Design
EST 604 Social Survey Research Methods for Environmental Issues
EST 605 Qualitative Methods
EST 702 Environmental and Natural Resources Program Evaluation
FOR 557 Practical Vector GIS
LSA 500 2D Digital Graphics and Documents
LSA 501 Computer Graphics II
LSA 640 Research Methods
o SU courses – depends upon interest of the student and steering committee
o *Note: ECPP Area of Study faculty would still prefer two courses from this list required instead of one.

3. Biophysical Science List:

o ESF courses
CEN 573 Principles and Design in Air Pollution Control
CIE 554 Principles of Environmental Toxicology
EFB 516 Ecosystems
EFB 518 Systems Ecology
EFB 522 Biophysical Economics
EFB 525 Limnology Practicum
EFB 600 Toxic Health Hazards
EFB 611 Topics in Environmental Toxicology
EFB 624 Limnology
ESC 525 Energy Systems
ESC 535 Renewable Energy
ENS 622 Energy Markets and Regulation
ENS 607 Wetland Practicum
FOR 521 Forest Ecology and Silviculture
FOR 523 Tropical Ecology
FOR 532 Forest Ecology
FOR 540 Watershed Hydrology
FOR 545 Introduction to Soils
FOR 607 Restoration Ecology
FOR 642 Watershed Ecology and Management
FOR 680 Urban Forestry