

CURRICULUM CHANGE PROPOSAL

APPROVAL PAGE

Proposal Title: Updates to the MS in Environmental Science Fast Track

College: Science Department: Geology

DEPARTMENT CHAIR

I have read the enclosed proposal and approve this proposal on behalf of the department.

James Kubicki

01/15/2021

Signature

Date

COLLEGE CURRICULUM COMMITTEE CHAIR

I have read the enclosed documents and approve the proposal on behalf of the college curriculum committee.

Nancy Marcus

1-15-2021

Signature

Date

COLLEGE DEAN

I have read the enclosed documents and approve the proposal on behalf of the college. I certify that the necessary funds will be allocated by the college in support of this proposal.

Robert A. Kuhl

1/15/2021

Signature

Date

GRADUATE CURRICULUM CHANGE MEMO

Date: 01/15/21
From: Vanessa Lougheed, Environmental Science Program
Through: Dr. Jim Kubicki, Chair, Department of Geological Sciences
Through: Dr. Rob Kirken, Dean, College of Science
To: Chair, Graduate Council

Proposal Title: Updates to the MS in Environmental Science Fast Track

This is to correct a small error in the MS in Environmental Science fast track, where we listed dozens of eligible courses, but neglected to allow any ESCI (Environmental Science) classes to count.

Fast-Track Program Request

1. Indicate the undergraduate and graduate academic programs in the college that agree to participate in the dual credit program.
2. Undergraduate students in the program must have successfully completed at least 90 hours of undergraduate coursework toward their major with a minimum of 24 of those hours at UTEP. Also, students must have and maintain the same GPA requirement in the major as for the university honor's certificate, which is an undergraduate GPA equal or greater than 3.30/4.00. Identify additional departmental admission requirements for the program.
3. Each participating undergraduate academic program must determine which 5000 level courses will count toward the undergraduate degree. Likewise, each participating graduate academic program must determine which 5000 level courses will be included in the fast track program.

College: Science

Graduate Degree: M.S. in Environmental Sciences

Undergraduate Degree: B.S in Environmental Sciences

Dual Credit Program Admission Requirements:

Minimum GPA (3.30/4.00 or higher): 3.30

Maximum Number of Graduate Credit Hours Allowed (up to 15 hours): 9

Other: _____

Graduate Course Inventory Approved for Dual Credit

Course Prefix & No. **All 5000 level GEOL and ESCI courses except Graduate Research**

Title: see attached for course titles

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Course Prefix & No. _____
Title: _____

Course Prefix & No. _____
Title: _____

Course Prefix & No. _____
Title: _____

Course Prefix & No. _____
Title: _____

Course List for Consideration Dual-Credit Fast-Track Program

BIOL 5130 Seminar 1
BIOL 5131 Ethical, Soc/Pol Dimensions 1
BIOL 5301 Select Adv Topics Biol Science 3
BIOL 5305 Herpetology 3
BIOL 5307 Biology of the Pleistocene 3
BIOL 5308 Rsrch Funding & Prof Developmt 3
BIOL 5313 Biogeography 3
BIOL 5316 Biosystematics 3
BIOL 5318 Ecology of Desert Organisms 3
BIOL 5322 Advances/Evolutionary Theory 3
BIOL 5323 Ultrastructure 3
BIOL 5324 Mammalogy 3
BIOL 5326 Advances Immunological Concept 3
BIOL 5327 Advances in Ecological Theory 3
BIOL 5328 Biostatistics 3
BIOL 5329 Physiology of Bacterial Cell 3
BIOL 5340 Structure/Funct Macromolecules 3
BIOL 5342 Synthesis/Degrad Macromolecule 3
BIOL 5343 Mechanisms-Cellular Toxicity 3
BIOL 5344 Molecular Pathogenesis 3
BIOL 5346 Ecosystem Toxicology 3
BIOL 5351 Intro Bio I:Basic Seq. Comp. 3
BIOL 5352 Intro Bio II: Gene Find/Compar 3
BIOL 5354 Post-genomic Analysis 3
BIOL 5360 Limnology 3

BINF 5351 Intro. Bioinformatics I 3
BIOL 5351 Intro Bio I:Basic Seq. Comp. 3
BINF 5352 Intro. Bioinformatics II 3
BIOL 5352 Intro Bio II: Gene Find/Compar 3
BIOL 5316 Biosystematics 3
BIOL 5326 Advances Immunological Concept 3
BIOL 5329 Physiology of Bacterial Cell 3
BIOL 5340 Structure/Funct Macromolecules 3
BIOL 5342 Synthesis/Degrad Macromolecule 3
BIOL 5343 Mechanisms-Cellular Toxicity 3
BIOL 5344 Molecular Pathogenesis 3

BINF/CHEM 5341 Anal./Model of Bio Structures 3
CHEM 5321 Advanced Organic Chemistry I 3
CHEM 5322 Advanced Organic Chemistry II 3
CHEM 5329 Contem Topics Organic Chemistr 3
CHEM 5339 Contemp Topics in Biochemistry 3

BINF/STAT 5354 Post-Genomic Analysis 3
STAT 5329 Statistical Programming 3
STAT 5428 Intro to Statistical Analysis 4
MATH 5335 Techniques in Optimization 3
MATH 5330 Comp Methods of Linear Algebra 3

CHEM 5322 Advanced Organic Chemistry II 3
CHEM 5351 Advanced Physical Chemistry I 3

PHYS 5321 Mechanics 3

PHYS 5325 Mathematical Physics 3
PHYS 5341 Electrodynamics 3
PHYS 5361 Quantum Mechanics 3
PHYS 5365 Advanced Statistical Mechanics 3
PHYS 5371 Solid State Physics 3
PHYS 5196 Graduate Research in Physics 1-3
or PHYS 5396 Graduate Research in Physics
PHYS 5393 Special Topics in Physics 3

PHYS 5321 Mechanics 3
PHYS 5325 Mathematical Physics 3
PHYS 5341 Electrodynamics 3
PHYS 5361 Quantum Mechanics 3
PHYS 5365 Advanced Statistical Mechanics 3
PHYS 5371 Solid State Physics 3
PHYS 5196 Graduate Research in Physics PHYS 5396

MATH 5310 Elements of Applied Functional Anal 3
MATH 5311 Applied Mathematics 3
MATH 5314 Partial Differential Equations 3
MATH 5315 Finite Element Methods I 3
MATH 5321 Principles of Analysis 3
MATH 5325 Principles of Algebra 3
MATH 5329 Numerical Analysis 3
MATH 5330 Comp Methods of Linear Algebra 3
MATH 5331 Real Variables 3
MATH 5335 Techniques in Optimization 3
MATH 5341 General Topology 3
MATH 5343 Numer Solution Part Diff Equat 3
MATH 5345 Numerical Optimization 3
MATH 5346 Interior-Point Methods for Lin 3
MATH 5351 Complex Variables 3

MATH 5321 Principles of Analysis 3
STAT 5329 Statistical Programming 3
STAT 5428 Intro to Statistical Analysis 4

GEOL 5101 Graduate Seminar 1
GEOL 5102 Geology of the Southwest 1
GEOL 5115 Selected Topics in Geol Scien 1
GEOL 5162 Directed Study in Geology 1
GEOL 5289 Graduate Research in Geol Sci 2
GEOL 5303 Computer Appl in Earth Sci 3
GEOL 5307 Paleobiology 3
GEOL 5308 Planetary Geology 3
GEOL 5310 Intro Entrepreneurial Geosci 3
GEOL 5311 Adv Entrepreneurial G.S. 3
GEOL 5315 Selected Topics-Geological Sci 3
GEOL 5317 Hydrogeology 3
GEOL 5318 Petroleum Geology 3
GEOL 5320 Environmental Tracers in Water 3
GEOL 5324 Geocomputation 3
GEOL 5343 Isotope Geology 3
GEOL 5344 Advanced Petrology 3
GEOL 5345 Environmental Geochemistry 3
GEOL 5348 Electron Probe Microanalysis 3
GEOL 5362 Directed Study in Geology 3
GEOL 5363 Sandstone Petrography 3
GEOL 5364 Sedimentary Depositional Envir 3
GEOL 5365 Basin Analysis 3
GEOL 5375 Quantit Techniq Geological Sci 3
GEOL 5376 Low Temperature Geochemistry 3

GEOL 5378 Global Biochemical Cycles 3
GEOL 5379 Petroleum Geochemistry 3
GEOL 5381 Paleoclimatology 3
GEOL 5384 Nuclear Fuel Cycle 3
GEOL 5387 Applied Quaternary Geology 3
GEOL 5389 Graduate Research in Geol Sci 3
GEOL 5392 Environmental Risk Assessment 3
GEOL 5397 Geol/Mineral Resources Mexico 3
GEOL 5401 Fundamentals of Earth Science 4
GEOL 5402 Fundmntls/Fld Meth in Earth Sci 4

GEOP 5163 Directed Study in Geophysics 1
GEOP 5263 Directed Study in Geophysics 2
GEOP 5306 Atmospheric Processes 3
GEOP 5336 Digital Image Processing 3
GEOP 5352 Geophysical Inverse Theory 3
GEOP 5353 Reflection Seismic Data Proces 3
GEOP 5354 Seismology 3
GEOP 5356 Topics in Geophysics 3
GEOP 5357 Well Logging 3
GEOP 5361 Plate Tectonics 3
GEOP 5362 Reflection Seismic Data Interp 3
GEOP 5363 Directed Study in Geophysics 3
GEOP 5364 North Amer Geophysical Framewk 3
GEOP 5460 Geop App-Digital Signal Proces 4
GEOL 5321 Introduction to GIST 3
GEOL 5322 Advanced GIST 3
GEOL 5323 Spat Analysis Earth/Env Sci 3