

**UCC/UGC/ECCC**

Proposal for Plan Change or Plan Deletion

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| **[ ]  FAST TRACK (Select if this will be a fast track item**. Refer to  [***Fast Track Policy***](http://www4.nau.edu/avpaa/UCCPolicy/Agenda_FastTrack_Consent.docx) for eligibility) |

***If this proposal represents changes to the intent of the plan or its integral components, review by the college dean, graduate dean (for graduate items) and/or the provost may be required prior to college curricular submission.***

***All Plans with NCATE designation, or plans seeking NCATE designation, must include an NCATE Accreditation Memo of Approval from the NAU NCATE administrator prior to college curricular submission.***

***UCC proposals must include an updated 8-term plan.***

***UGC proposals must include an updated program of study.***

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| 1. College: | **CENFS**  | 2. Academic Unit: | **SESES**  |
|  |  |  |  |
| 3. Academic      Plan Name: | **Environmental Sciences; B.S. (ENVSCBS)** | 4. Emphasis: | **Applied Geology (ESAGM)** |

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| 5. Plan proposal: | [x]  Plan Change | **[ ]** Plan Deletion |
|  | **[ ]** New      Emphasis | **[x]** Emphasis       Change | **[ ]** Emphasis             Deletion |

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| 6. Current student learning outcomes of the plan. If structured as plan/emphasis, include for **both c**ore and emphasis. 1. Students will demonstrate an understanding and ability to use key concepts from the environmental sciences.2. Students will demonstrate oral and written skills in presenting information in the environmental sciences.3. Students will demonstrate skills in conductingresearch and/or applying environmental sciences knowledge in an employment setting.4. Students will demonstrate understanding of key concepts and skills in their emphasis | Show the proposed changes in this column (if applicable). **Bold** the changes, to differentiate from what is not changing, and change font to **~~Bold Red with strikethrough~~**for what is being deleted. *(*[*Resources, Examples & Tools for Developing Effective Program Student Learning Outcomes*](http://www4.nau.edu/avpaa/Assessment/ProgramLearningOutcomesPDF_090712.pdf)*).***UNCHANGED** |

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| 7. Current catalog plan overview and requirements in this column. Cut and paste the *Overview* and *Details* tabs, in their entirety, from the current on-line academic catalog: (<http://catalog.nau.edu/Catalog/>)Environmental Sciences; B.S. In addition to University Requirements:* At least 82 units of major requirements including at least 42-62 units of emphasis requirements
* Be aware that you may not use courses with an ENV prefix to satisfy liberal studies requirements
* Elective courses, if needed, to reach an overall total of at least 120 units

Please note that you may be able to use some courses to meet more than one requirement. Contact your advisor for details.

| Minimum Units for Completion | 120 |
| --- | --- |
| GPA | C |
| Emphasis, Minor, Certificate | Required |
| Fieldwork Experience/Internship | Optional |
| Research | Optional |
| University Honors Program | Optional |
| Progression Plan | [View Progression Plan](http://catalog.nau.edu/ProgressionPlans/index.jsp?inst=NAU00&cat=1314#ENVSCBS) |

*Major Requirements*Take the following 82 - 102 units with a grade of Grade of "C" or better in the first 37 units and a "C" average in emphasis courses:* ENV 230, ENV 326 ENV 326L, ENV 360 (12 units)
* ENV 385W (4 units)
* ENV 408 or ENV 485 (3 units)
* CHM 151, CHM 151L, CHM 152, CHM 152L (9 units)
* POS 359 and (STA 270 or STA 275]) (6 units)
* ENV 490C (3 units)
* One additional upper-division ENV course (3 units)

Emphasis Requirements (Select One):Applied Geology Emphasis (50 units)Select one of the following combinations (4 units):* + GLG 101, GLG 103 (Recommended)
	+ GLG 100, GLG 100L with grades of "B" or better
	+ GLG 112, GLG 112L with grades of "B" or better
* GLG 102, GLG 104, GLG 240, GLG 309, GLG 324, GLG 360, GLG 430, GLG 435, GLG 451 (31 units)
* MAT 136 MAT 137 (8 units)
* PHY 111 or PHY 161 (4 units)
* One additional upper-division ENV course (3 units)

Applied Mathematics Emphasis (44 units)* (CS 122 and CS 122L) or CS 123 (3 units)
* ENV 440, ENV 440L (4 units)
* GSP 239 (4 units)
* MAT 136, MAT 137, MAT 238, MAT 239, MAT 316 (18 units)
* STA 471 (3 units)
* Select four or more additional mathematics, statistics, and/or science courses chosen with your advisor's approval; excluding BIO 326, BIO 326LW, any recitation ("R") courses. (12 units)

Biology Emphasis (44-49 units)* BIO 181, BIO 181L, BIO 182, BIO 182L, BIO 205, BIO 205L (12 units)
* CHM 230, CHM 360 (6 units)
* ENV 440, ENV 440L (4 units)
* GSP 239 (4 units)
* MAT 136 or (MAT 114, MAT 119, and MAT 131) (4-9 units)
* Select 14 units of non-repeating courses, with 7 of the 14 units at the 300-level or above from ENV, BIO, CHM, FOR, or GLG courses; excluding ENV 101, ENV 101L, ENV 182, BIO 100, BIO 100L, BIO 171, BIO 326, BIO 326LW, GLG 100, GLG 100L, CHM 130 or any recitation ("R") courses. (14 units)

Chemistry Emphasis (42 units)* CHM 235, CHM 235L, CHM 238, CHM 238L, CHM 320, CHM 320L, CHM 341, CHM 425C, CHM 425L (22 units)
* ENV 430 (3 units)
* MAT 136, MAT 137 (8 units)
* PHY 161, PHY 262 (PHY 262L is not required) (7 units)
* One additional upper-division ENV course (3 units)

Environmental Administration and Policy Emphasis (48 units)* BIO 181, BIO 181L, BIO 182, BIO 182L (8 units)
* COM 150 (3 units)
* GLG 101, GLG 103 (4 units)
* PHI 331 (3 units)
* POS 224, POS 250, POS 325, POS 344, POS 455 (15 units)
* One 200-level or higher, non-repeating, CHM, GLG, PHY, or BIO course (excluding BIO 326, BIO 326LW or recitations) (3 units)
* One additional upper-division ENV course (3 units)
* One budgeting and/or economics course, chosen from a departmental list (may include POS, STA, ECO, and FOR) (3 units)
* Related coursework chosen with your advisor's approval (6 units)

Please note that we recommend the following courses:* Politics: POS 314, POS 315, POS 316, POS 317, POS 326, POS 335, POS 345, POS 421C, POS 428
* International and Comparative Politics: POS 360, POS 361, POS 362, POS 364, POS 366, POS 370, POS 372, POS 374, POS 380, POS 480
* Geography, Planning, and Recreation: GSP 201, GSP 206, GSP 302, GSP 401, GSP 499
* Environmental Sciences: ENV 440, FOR 445
* Social Sciences: ANT 370, CCJ 312, ECO 324, SOC 414
* Humanities: REL 380, REL 391

Environmental Communication Emphasis (47 units)* BIO 181, BIO 181L, BIO 182, BIO 182L (8 units)
* GLG 101, GLG 103 (4 units)
* JLS 131, JLS 231 (6 units)
* COM 131, COM 150, COM 200, CST 111 (12 units)
* One 200-level or higher, non-repeating, CHM, GLG, PHY, or BIO course; excluding BIO 326, BIO 326LW or recitation ("R") (3 units)
* One additional upper-division ENV course (3 units)

Select related coursework, with your advisor's approval, from (11 units):* COM 250, COM 400
* EMF 223, EMF 229
* GSP 239
* JLS 382, JLS 431C, JLS 482
* PHO 281
* PR 332, CST 323, CST 361, CST 472, CST 477

Environmental Management Emphasis (62 units)* BIO 181, BIO 181L, BIO 182, BIO 182L (8 units)
* ECO 284 (3 units)
* MAT 125 or MAT 136 (4 units)
* ENV 440 (3 units)
* FOR 230, FOR 381, FOR 430 (9 units)
* GSP 239, GSP 302 (7 units)
* Select two courses from: FOR 360, FOR 370, FOR 382, FOR 445; (PRM 346W or POS 344) (6 units)
* One additional upper-division ENV course (3 units)
* Select from: PHI 105, PHI 331; REL 380, REL 391 (3 units)
* Select from: ECO 285, ECO 324, ECO 486 (3 units)
* Select from: POS 250, POS 345 (3 units)
* Select from: ANT 370; MGT 303; POS 455; SOC 319 (3 units)
* Select from: GSP 320, GSP 331 (4 units)
* Select from: COM 150; CST 271, CST 323 (3 units)

*General Electives*Additional coursework is required, if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit. You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren't used to meet major, minor, or liberal studies requirements.)*Additional Information*Be aware that some courses may have prerequisites that you must also take. For prerequisite information click on the course or see your advisor. | Show the proposed changes in this column.  **Bold** the changes, to differentiate from what is not changing, and change font to **~~Bold Red with strikethrough~~** for what is being deleted.Environmental Sciences; B.S. In addition to University Requirements:* At least 82 units of major requirements including at least 42-62 units of emphasis requirements
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| --- | --- |
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| Emphasis, Minor, Certificate | Required |
| Fieldwork Experience/Internship | Optional |
| Research | Optional |
| University Honors Program | Optional |
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* GLG 102, GLG 104, GLG 240, **(GLG 259 and GLG 259L)**, GLG 309, GLG 324, GLG 360, **~~GLG 430~~**, GLG 435, GLG 451 (31 units)
* MAT 136 MAT 137 (8 units)
* PHY 111 or PHY 161 (4 units)
* One additional upper-division ENV course (3 units)

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* GLG 101, GLG 103 (4 units)
* PHI 331 (3 units)
* POS 224, POS 250, POS 325, POS 344, POS 455 (15 units)
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* One additional upper-division ENV course (3 units)
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* GLG 101, GLG 103 (4 units)
* JLS 131, JLS 231 (6 units)
* COM 131, COM 150, COM 200, CST 111 (12 units)
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* PHO 281
* PR 332, CST 323, CST 361, CST 472, CST 477

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* GSP 239, GSP 302 (7 units)
* Select two courses from: FOR 360, FOR 370, FOR 382, FOR 445; (PRM 346W or POS 344) (6 units)
* One additional upper-division ENV course (3 units)
* Select from: PHI 105, PHI 331; REL 380, REL 391 (3 units)
* Select from: ECO 285, ECO 324, ECO 486 (3 units)
* Select from: POS 250, POS 345 (3 units)
* Select from: ANT 370; MGT 303; POS 455; SOC 319 (3 units)
* Select from: GSP 320, GSP 331 (4 units)
* Select from: COM 150; CST 271, CST 323 (3 units)

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8. Justification for proposal:

**The department is proposing to change GLG 430 to GLG 259/259L and cross list with GSP 259. Their reasons for the change are:**

**1) Expand course offerings for lower-division GLG majors while reducing the current bulge in upper-division course progression.**

**(2) Eliminate redundant course offering by cross-listing between GLG and GSP.**

**(3) Use efficiency to expand range of topics by offering a new advanced course in geomorphology.**

**This proposal is to replace GLG 430 with GLG 259/GLG 259L.**

9. NCATE designation, if applicable**:**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| [ ]  Initial Plan |  | [ ]  Advanced Plan |  | [ ]  Remove Designation |
| 10. Effective beginning **FALL**: | **2014** |  |
|  [**See effective dates calendar**](http://www4.nau.edu/avpaa/timelines/1314Effective.xls). |  |

11. Will this proposal impact other plans, sub plans, or course offerings, etc.? Yes [ ]      No [x]

   If yes, describe the impact. If applicable, include evidence of notification to and/or response from

 each impacted academic unit

**Answer 12-13 for UCC/ECCC only:**

12. A major is differentiated from another major by required course commonality: 24 units of the        required credit hours of a major must be unique, (i.e. not common or not dual use as a required        element in another major), to that major. Does this plan have 24 units of unique required        credit? Yes [x]       No [ ]

13. Minor: A planned group of courses from one or more subject matter areas consisting of at least        18 hours and no more than 24 hours. At least 12 hours of the minor must be unique to that minor        to differentiate it from other minors.

         Does this minor have 12 units of unique required credit? Yes [ ]       No [ ]

**Answer 14-15 for UGC only:**

14. If this is a non-thesis plan, does it require a minimum of 24 units of formal graded coursework?                                                                                                                                       Yes [ ]       No [ ]

       If no, explain why this proposal should be approved.

15. If this is a thesis plan, does it require a minimum of 18 units of formal graded coursework?                                                                                                                                       Yes [ ]       No [ ]

       If no, explain why this proposal should be approved.

|  |  |
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| **FLAGSTAFF MOUNTAIN CAMPUS** |  |
| **Scott Galland**  | **10/07/2013** |
| Reviewed by Curriculum Process Associate | Date |
|  |  |
| **Approvals**: |  |
|  |  |
| Department Chair/Unit Head (if appropriate) | Date |
|  |  |
| Chair of college curriculum committee | Date |
|  |  |
| Dean of college | Date |
|  |  |
| **For Committee use only:** |  |
|  |  |
| UCC/UGC Approval | Date |

Approved as submitted: Yes [ ]  No [ ]

Approved as modified: Yes [ ]  No [ ]

|  |  |
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| **EXTENDED CAMPUSES** |  |
|  |  |
| Reviewed by Curriculum Process Associate | Date |
|  |  |
| **Approvals:**  |  |
|  |
| Academic Unit Head | Date |
|  |
| Division Curriculum Committee (Yuma, Yavapai, or Personalized Learning) | Date |
|  |
| Division Administrator in Extended Campuses (Yuma, Yavapai, or Personalized Learning) | Date |
|  |
| Faculty Chair of Extended Campuses Curriculum Committee (Yuma, Yavapai, or Personalized Learning) | Date |
|  |
| Chief Academic Officer; Extended Campuses (or Designee) | Date |
|  |  |

Approved as submitted: Yes [ ]  No [ ]

Approved as modified: Yes [ ]  No [ ]