MASTER OF EDUCATION DEGREE IN EDUCATIONAL LEADERSHIP

Foundations Emphasis – Program of Study

Please type or print legibly, secure your advisor’s signature.
(your advisor will submit this form to the EDL department office in Mesa)

Student Name: ___________________________ Student EMPL ID#: ______________________
(print) (print)

Student Signature: ___________________________ Date: ______________________

Advisor Name: ___________________________ Advisor Signature: ___________________________
(print) (print)

Advisor Site: ___________________________ Advisor Phone: ___________________________ Date: ______________________

FOUNDATIONS REQUIREMENTS FOR ALL DEGREE OPTIONS:

Select 12 semester hours from the following:

( ) EDF 584 Racism in U.S. Schools and Society 3
( ) EDF 602 Foundations of Native American Education 3
( ) EDF 670 Philosophy of Education 3
( ) EDF 671 History of American Education 3
( ) EDF 672 Comparative Education 3
( ) EDF 673 International Education 3
( ) EDF 677 Educational Sociology 3

STUDENTS MUST SELECT 1 OF THE FOLLOWING 3 OPTIONS:

1. THESIS OPTION:
   - Select 3 semester hours from the following: (3 units)
     ( ) EDR 611 Action Research 3
     or ( ) EDR 612 Ethnographic Research in Education 3
     or ( ) EDR 760 Evaluation Research 3
   - Complete at least six units of thesis credit (You may end up taking more than 6 units of thesis credit
     because you must register for it each semester while you are working on your thesis). (6 units)
     ( ) EDF 699 Thesis 6
   - Select Focus or Discipline-Based electives chosen in consultation with your advisor: (9 units)
     ( ) ___________________________ 3
     ( ) ___________________________ 3
     ( ) ___________________________ 3
2. NON-THESIS OPTION:
( ) EDR 610 Introduction to Research 3

Select 3 semester hours from the following:
( ) EDF 584 Racism in U.S. Schools and Society 3
( ) EDF 602 Foundations of Native American Education 3
( ) EDF 670 Philosophy of Education 3
( ) EDF 671 History of American Education 3
( ) EDF 672 Comparative Education 3
( ) EDF 673 International Education 3
( ) EDF 677 Educational Sociology 3

Focus or Discipline-Based electives chosen in consultation with your advisor (12 semester hours)
( ) ____________________________ 3
( ) ____________________________ 3
( ) ____________________________ 3
( ) ____________________________ 3

3. GRADUATE CERTIFICATION OPTION:
The student will select one Graduate Certificate offered by NAU from the following list:
http://nau.edu/GradCol/Degrees-and-Programs/Certificates/. If a 12 or 15 credit hour Graduate Certificate is chosen as part of this degree, the student will work with his/her advisor to select the most relevant additional three or six credit hours from either the EDF list above and/or including EDR 610.
( ) Grad Certificate ____________________________ 12-18
( ) ____________________________ 3
( ) ____________________________ 3

Total Semester Hours 30

You must complete all requirements for your M.Ed. within a six-year period and apply for graduation the semester before you plan to graduate. If you miss three or more consecutive regular semesters, you may need to reapply for admission to the Graduate College and to the EDL department.

Check Statement Below, if applicable
This Program of Study dated ________ replaces and supersedes any previously-submitted EDL POS or emphasis.
Please attach proposed Syllabus in approved university format.

1. Course subject and number:  ENV 675
   See upper and lower division undergraduate course definitions.

2. Units:  2

3. College:  CEFNS

4. Academic Unit:  Sustainability

5. Student Learning Outcomes of the new course.  (Resources & Examples for Developing Course Learning Outcomes)

SEE ATTACHED SAMPLE SYLLABUS

6. Justification for new course, including how the course contributes to degree program outcomes, or other university requirements / student learning outcomes.  (Resources, Examples & Tools for Developing Effective Program Student Learning Outcomes)

The proposed course ENV675 is based on an ENV seminar course (698) that has been offered over the past 3 years to support the Climate Science and Solutions (CSS) PSM program. ENV675 will replace this temporary seminar course with a permanent class line and will serve as a core course in the CSS PSM program. ENV675 will also be available to students from other master’s programs on campus, including SESES’s Environmental Science and Policy (ES&T) Master’s program.

The curriculum development for ENV675 was funded by an NSF grant as part of the Ethics Education in Science and Engineering (EESE) program (PI Downard; CoPIs Huntzinger and Nielsen) and is designed to provide students with a basic understanding of the relevance of ethics and civil discourse in effective communication around controversial environmental issues, such as climate change. The proposed course is a 2-credit topics course that is intended to be team-taught. Students can take the course up to 3 times for a total of 6 credit hours. The topic of the course will alternate through a three topic series (e.g., climate change adaptation in the fall; energy technology and policy in the spring; and climate change mitigation the following fall). All three of these topic areas are poorly covered in the current CSS curriculum and other CEFNS level graduate courses and strongly support the overall learning objectives of the CSS program, which include the following:

- Understand and explain the physical nature of global climate change;
- Apply national and international standards to conduct professional entity-level project-based greenhouse gas inventories;
- Evaluate the social and economic externalities of climate change;
- Describe the ethical, scientific, and policy strengths and weaknesses of current and proposed mitigation and adaptation strategies; and
• Identify, analyze, synthesize, and communicate scientific information and uncertainties for public and professional audiences.

7. Effective BEGINNING of what term and year? Fall 2014
   See effective dates calendar.

8. Long course title: TOPICS IN ENVIRONMENTAL DISCOURSE
   (max 100 characters including spaces)

9. Short course title: TOPICS IN ENV DISCOURSE
   (max. 30 characters including spaces)

10. Catalog course description (max. 60 words, excluding requisites):
    The aim of this course is to improve the basic deliberation and communication skills of students through a better understanding of the role of ethics in public perception and policy formation surrounding climate change adaptation. Through this course, we will create an ongoing dialogue about climate change adaptation that focuses on the importance of understanding the intertwined issues that reside at the intersection of ethics, science, and public policy.

11. Will this course be part of any plan (major, minor or certificate) or sub plan (emphasis)?
    Yes ☒ No ☐
    If yes, include the appropriate plan proposal.
    Climate Science and Solutions M.S., Environmental Sciences and Policy M.S.

12. Does this course duplicate content of existing courses?
    Yes ☐ No ☒
    If yes, list the courses with duplicate material. If the duplication is greater than 20%, explain why NAU should establish this course.

13. Will this course impact any other academic unit’s enrollment or plan(s)?
    Yes ☐ No ☒
    If yes, include a letter of response from each impacted academic unit.

14. Grading option:Letter grade ☒ Pass/Fail ☐ Both ☐

15. Co-convened with:
    14a. UGC approval date*:
    (For example: ESE 450 and ESE 550) See co-convening policy.
    *Must be approved by UGC before UCC submission, and both course syllabi must be presented.

16. Cross-listed with:
    (For example: ES 450 and DIS 450) See cross listing policy.
    Please submit a single cross-listed syllabus that will be used for all cross-listed courses.

17. May course be repeated for additional units?
    Yes ☒ No ☐
    16a. If yes, maximum units allowed? 6
    16b. If yes, may course be repeated for additional units in the same term? Yes ☐ No ☒
18. Prerequisites: Admission to the Graduate College
If prerequisites, include the rationale for the prerequisites.
Course is intended for graduate students. Undergraduates will only be allowed to enroll in course with instructor approval

19. Co requisites: ____________________________
If co requisites, include the rationale for the co requisites.

20. Does this course include combined lecture and lab components? Yes ☐ No ☒
If yes, include the units specific to each component in the course description above.
Dr. Deborah Huntzinger, Dr. Jeff Downard, Dr. Erik Nielsen, Dr. Jennifer Wade

21. Names of the current faculty qualified to teach this course: ____________________________

Answer 22-23 for UCC/ECCC only:

22. Is this course being proposed for Liberal Studies designation? Yes ☐ No ☐
If yes, include a Liberal Studies proposal and syllabus with this proposal.

23. Is this course being proposed for Diversity designation? Yes ☐ No ☐
If yes, include a Diversity proposal and syllabus with this proposal.

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**FLAGSTAFF MOUNTAIN CAMPUS**

**Scott Galland**
Reviewed by Curriculum Process Associate
Date 2/3/2014

**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 ☐
16b. If yes, may course be repeated for additional units in the same term?  Yes ☐  No ☒

18. Prerequisites:  Admission to the Graduate College
If prerequisites, include the rationale for the prerequisites.

Course is intended for graduate students. Undergraduates will only be allowed to enroll in course with instructor approval

19. Co requisites:  
If co requisites, include the rationale for the co requisites.

20. Does this course include combined lecture and lab components?  Yes ☐  No ☒
If yes, include the units specific to each component in the course description above.

Dr. Deborah Huntzinger, Dr. Jeff Downard, Dr. Erik Nielsen, Dr. Jennifer Wade

21. Names of the current faculty qualified to teach this course:

Answer 22-23 for UCC/ECCC only:

22. Is this course being proposed for Liberal Studies designation?  Yes ☐  No ☒
If yes, include a Liberal Studies proposal and syllabus with this proposal.

23. Is this course being proposed for Diversity designation?  Yes ☐  No ☒
If yes, include a Diversity proposal and syllabus with this proposal.

FLAGSTAFF MOUNTAIN CAMPUS

Scott Galland  12/10/2013
Reviewed by Curriculum Process Associate  Date

Appraovals:

Department Chair/Unit Head (if appropriate)  12-19-12
Date

Chair of college curriculum committee  Date

Dean of college  Date

For Committee use only:

UCC/UGC Approval  3/12/14  Date
16b. If yes, may course be repeated for additional units in the same term?  
Yes ☐ No ☒

18. Prerequisites:  
Admission to the Graduate College  
If prerequisites, include the rationale for the prerequisites.

Course is intended for graduate students. Undergraduates will only be allowed to enroll in course with instructor approval

19. Co requisites:
If co requisites, include the rationale for the co requisites.

20. Does this course include combined lecture and lab components?  
Yes ☐ No ☒
If yes, include the units specific to each component in the course description above.

Dr. Deborah Huntzinger, Dr. Jeff Downard, Dr. Erik Nielsen, Dr. Jennifer Wade

21. Names of the current faculty qualified to teach this course:

Answer 22-23 for UCC/ECCC only:

22. Is this course being proposed for Liberal Studies designation?  
Yes ☐ No ☐
If yes, include a Liberal Studies proposal and syllabus with this proposal.

23. Is this course being proposed for Diversity designation?  
Yes ☐ No ☐
If yes, include a Diversity proposal and syllabus with this proposal.

FLAGSTAFF MOUNTAIN CAMPUS

Scott Galland  
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
## EXTENDED CAMPUSES

<table>
<thead>
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<tr>
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<tr>
<td><strong>Approvals:</strong></td>
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<tr>
<td>Academic Unit Head</td>
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<tr>
<td>Division Curriculum Committee (Yuma, Yavapai, or Personalized Learning)</td>
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<tr>
<td>Division Administrator in Extended Campuses (Yuma, Yavapai, or Personalized Learning)</td>
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<tr>
<td>Faculty Chair of Extended Campuses Curriculum Committee (Yuma, Yavapai, or Personalized Learning)</td>
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<tr>
<td>Chief Academic Officer; Extended Campuses (or Designee)</td>
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Approved as submitted: Yes ☐ No ☐

Approved as modified: Yes ☐ No ☐
ENV 675
Climate Science & Solutions Seminar (2 credits)
Topics in Environmental Discourse:
(SAMPLE TOPIC) Climate Change Adaptation
Fall 2013

TIME & PLACE: Mondays and Wednesdays 9:10 – 10:00 a.m.
Physical Sciences, Room 111, Bldg. 19.

INSTRUCTORS:
Dr. Deborah Huntzinger: Physical Sciences, Room 007
Phone: 523-1669
Email: deborah.huntzinger@nau.edu
Office hours: Monday and Wednesdays from 2:00 – 3:00 p.m. or by appointment

Dr. Jeff Downard: Babbitt Academic Annex, Room 306
Phone: 523-8354
Email: jeffrey.downard@nau.edu
Office hours: Tues: 12:00 – 2:00 p.m. or by appointment

Course Description:
The aim of this course is to improve the basic deliberation and communication skills of students
through a better understanding of the role of ethics in public perception and policy formation
surrounding climate change adaptation. Through this course, we will create an ongoing dialogue
about climate change adaptation that focuses on the importance of understanding the intertwined
issues that reside at the intersection of ethics, science, and public policy. The goal of the course is to
improve your: (1) understanding of the sources of conflict surrounding climate change adaptation; and
(2) ability to identify actual and potential causes of disagreements between groups. The course will
help you sort through key questions and competing solutions using a series of case studies, reflective
writing assignments, and public discussions.

Learning Objectives:
At the completion of this course, you should be able to:
• Recognize how climate change projections vary for different regions and why;
• Explain key uncertainties associated with climate projections;
• Describe how changing climatic conditions may impact the vulnerability of communities and
  ecosystems in different regions;
• Recognize and describe how the potential impact from, and capacity to adapt to, changing
  climatic conditions varies across communities and groups both within and across regions;
• Explain how values can drive response to climate change and define limits to adaptation;
• Identify and compare the types of adaptive strategies that have been proposed/adopted in
  different regions;
• Recognize the ethical and social justice implications of adaptation strategies;
• Identify inconsistencies in social arguments for adaptation strategies; and
• Describe how social conflicts arise surrounding adaptation strategies.

These are complex objectives. Simply understanding the ethical, scientific, or policy questions/issues
is insufficient. You must be able to cross from science to policy to ethics and back again. You will
also be expected to seek out and synthesize information from a variety of sources. Working
individually and in teams, you will need to educate yourself about the climate change adaptation
issues in different regions.

Course Structure
The course will meet for 50 minutes twice a week, and includes a combination of in-class exercises, reflective writing pieces, case studies, and in-class and public discussions to improve your understanding and communication of the ethical, scientific, and policy issues surrounding climate change adaptation. Class periods will be interactive, and you are expected to actively engage in discussions and to bring questions and new information to class each day. This requires that you complete the reading prior to class sessions.

Text Book and Readings
Required
- Readings posted to the course BBlearn site

A portion of this course centers on self-directed learning and research both individually and in a group setting. Therefore, for some aspects of the course (e.g., public discussions), you will have to identify resources on your own (not provided as course readings). You will be expected to seek out information from a variety of sources, synthesize that information, and convey it in a way that is accessible to a diverse audience.

Electronic Communication
Please communicate electronically using your NAU email address. Be sure to your NAU e-mail account and BBlearn regularly for updates on readings and assignments.

Evaluation (1000 points possible)
Critical Reflections (600 points)
You will be asked to write 10 critical reflections over the course of the semester; each will be worth 60 points. Each critical reflection should:
- Be no more that 2-pages and no less than 1.5 pages in length (not including your reference cited);
- Be formatted to have 1-inch margins and 12 point, Times New Roman font; and
- Include your name and the date that the reflection is due in the header of the document.

Failure to follow these format instructions will result in a 5-point deduction from your earned points. All reflections should be submitted in hard-copy format at the start of the class period in which they are due.

In each reflection, you will be asked to write about something related to the class readings, public discussions, in-class exercises, etc. You should not only describe the topic, but also provide a thoughtful analysis of your opinions or thoughts on that topic. In your reflections, you should provide logical reasons and evidence (from research, literature, common knowledge, current events, etc.) to support your points. These reflections are a place for you to challenge and evaluate your assumptions so that you can gain useful insights into the topic you are writing about. Specific guidelines for each reflection piece will be provided.

The writing style in the reflections can have a more conversational tone than a research paper or journal article (i.e., more informal). However, you should still provide support for your ideas and organize your thoughts in a logical manner. Refer to the Texas A &M writing center for some tips on how to write a critical reflection: http://uwrc.tamu.edu/?p=10801.

When referencing published works, use the following reference format:


Within text reference examples:
"Huntzinger et al. (2009) showed how industrial waste by-products, such as cement kiln dust, could sequester or capture carbon. I feel that this type of waste re-use could help industry economically reduce their carbon emissions because..."

"Models do not agree on whether North America is a significant source or biospheric sink of atmospheric carbon dioxide (Gurney et al., 2002; Prentice, 2001) and this model disagreement has made it difficult for..."

Public Discussions (300 points)
You will be required to attend 4 public discussions throughout the semester. The public discussions will be held in the evenings in Flagstaff (Museum of Northern Arizona) and Winslow (La Posada Hotel). We will provide shuttle service for all events, as well as institutional excuses (as needed). Refer to the syllabus for the dates of the public discussions and plan accordingly.

The class will be divided into two groups. Each group will take responsibility for: (1) creating an informational sheet for the public discussion; and (2) helping to facilitate, document, and run that public discussion.

The two groups will be:
- Public Discussion Group 1 (PD G1): Adapting water resource management in the Southwest in the face of changing climatic conditions
- Public Discussion Group 2 (PD G2): Adapting land management in the Southwest in the face of changing climatic conditions and increased wildfire risk

Informational Sheets (150 points):
Each group will be responsible for creating an informational sheet that will be distributed to the attendees to aid in the discussion. The informational sheet must be professional, free of grammatical and spelling errors, no longer than 2 pages (front and back) with a one-page insert, and synthesize information for a diverse public audience. Guidance will be provided in class on the content and format requirements of the information sheet. You will be expected to submit both a draft (75 points) and final (75 points) version of your informational sheet.

Public Discussion Participation (50 points):
You are expected to help facilitate, document, and run your public discussion. Each person will be assigned a role for each pubic. You are expected to complete these roles in a professional manner and to work proactively with your group and class members to ensure that the public discussion is run in an organized and welcoming manner.

Public Discussion Attendance (100 points):
You are expected to attend all 4 public discussions. Attendance to each public discussion is worth 25 points.

Preparation and Participation (100 points)
Active preparation and participation in all aspects of this course is essential to your learning and is worth 10% of your grade. You will be expected to fully participate in all course exercises and discussions.

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<thead>
<tr>
<th>Assignments</th>
<th>Points</th>
<th>Percentage</th>
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<tbody>
<tr>
<td>2-page critical reflections (10 total; 60 points each)</td>
<td>600</td>
<td>60%</td>
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<tr>
<td>Public discussions</td>
<td>300</td>
<td>30%</td>
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<tr>
<td>Course preparation and participation</td>
<td>100</td>
<td>10%</td>
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</table>
Grading Scale:

Letter grades will be assigned on the following scale:
- A (90-100%)
- B (80-89.9%)
- C (70-79.9%)
- D (60-69.9%)
- F (>59.9%)

Course Policies

Attendance: Attending class is mandatory. Students in this course are expected to be responsible for their behavior, including attendance and the consequences of their absence. Attendance will be taken on a regular basis.

Work Expectations: A 2-credit course consists of 100 minutes per week of in-class time. It is expected that for each hour of class time two hours of out-of-class work time are to be performed. This work consists of preparation for class (e.g., pre-reading any material assigned, keeping current with project tasks), homework, and studying or reviewing any material that was presented each day.

Assignments: All homework must be submitted by the start of class on the specified deadline. Homework submitted after the deadline will be penalized one letter grade for every week-day the assignment is late.

Extra Credit, Make-up Assignments, Tests, and Retesting: There are no make-up assignments or tests without prior consent of the instructor. There may be options for extra-credit work, however any such assignments will be provided to the entire class. There will be no individual options.

Plagiarism and Cheating: Plagiarism and cheating are subject to the Arizona Board of Regents’ Code of Conduct Section 5-308 and the procedures outlined in the NAU Student Handbook. Websites for these documents are: http://www.azregents.edu/policymanual/default.aspx and http://nau.edu/Student-Life/Student-Handbook/

University Policies

University policies in the Student Handbook that must also be observed include the following. They can be found at http://www4.nau.edu/avpaa/UCCPolicy/plcystmt.html.

1. Safe Working and Learning Environment
2. Students with Disabilities
3. Academic Integrity
4. Institutional Review Board
5. Academic Contact Hour Policy
6. Sensitive Course Materials
<table>
<thead>
<tr>
<th>Week</th>
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<tr>
<td></td>
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<td></td>
<td>Adger, W.N. et al., &quot;Assessment of adaptation practices, options, constraints and capacity,&quot; in Parry, M.L. et al. (eds), IPCC 4th Assessment, Executive summary and Sections 17.2 and 17.2 (pgs. 715-727)</td>
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<td>Adger, W.N. et al., &quot;Assessment of adaptation practices, options, constraints and capacity,&quot; in Parry, M.L. et al. (eds), IPCC 4th Assessment, Sections 17.3 through 17.8</td>
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</tbody>
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<p>| Part I begins: Introduction to discourse about adaptation |
| 2    | 2-Sep | Labor Day — No class |       | In EPA crackdown on coal-fired plants justified? Arizona Daily Sun |       | 2P-reflection |
|      | 11-Sep | How do values define limits to adaptation? | Discussion | O'Brien K., &quot;Do values subjectively define the limits to climate change adaptation?&quot; Chapter 10 in Adapting to Climate Change, pgs. 164-180 | Hill, T., &quot;Ideals of Human Excellence and Preserving Natural Environments,&quot; Environmental Ethics, 5(3), 1983 | 2P-reflection |
|      | 16-Sep | Justice, fairness, and morality | Discussion | Broome, J., Climate Matters: Ethics in a Warming World, Chapters 4-5 |       |    |
| 4    | 18-Sep | Value of listening | Fish Bowl | Ropek, D., &quot;The EcoPerception Gap: Why do we worry too much about some environmental risks and not enough about others?&quot; Conservation Magazine, September 7th, 2012 | Individual research to prep for fish bowl exercise | 2P-reflection |
|      | 23-Sep | How do climate predictions limit adaptation? | Discussion | Dessler et al., &quot;Climate prediction: a limit to adaptation?&quot; Chapter 5 in Adapting to Climate Change, pgs. 64-76 | Patt, &quot;Learning to crawl: how to use seasonal climate forecasts to build adaptive capacity,&quot; Chapter 6 in Adapting to Climate Change, pgs. 79-95 | 2P-reflection |</p>
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<tr>
<td>6</td>
<td>30-Sep</td>
<td>Group meetings</td>
<td>Formal class meeting is replaced by group meetings with your PD group faculty advisor</td>
<td>Groom, J. <em>Climate Matters: Ethics in a Warming World</em>, Chapters 7-8.</td>
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<td>16-Oct</td>
<td>Group meetings</td>
<td>Formal class meeting is replaced by group meetings with your PD group faculty advisor</td>
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| 9    | 21-Oct | Coastal communities - Developed Countries | Discussion | How Superstorm Sandy changed the coastal adaptation conversation  
|      | 23-Oct | Coastal communities - Developed Countries Cont. | Role play / discussion | Money to rebuild coastal communities | Dugger, A.J. et al., "Worse Graveling settlement and limits to adaptation," Chapter 7 in *Adapting to Climate Change*, pgs. 96-113 | 2nd reflection |
| 10   | 28-Oct | Small island nations | Role play / discussion | Climate aid and adaptation | Final inernational sheet G1 and G2 | |

**Part 3 begins: Public discussions**

<p>| 10   | 30-Oct | Prepare for PD | Trail run PD | |
| 11   | 4-Nov  | PD prep | Trail run debriefing and PD prep | |
| 4-Nov | PD G1: Adapting water resource management in the SW in the face of changing climatic conditions – MNA, Flagstaff, 6 p.m. (be there at 5:30) | | |
| 6-Nov | PD prep second go around | Debriefing and discussion of first G1 PD | |
| 8-Nov | PD G1: Adapting water resource management in the SW in the face of changing climatic conditions – La Posada, Winslow AZ, 6 p.m. (be there at 5:30) | | |
| 12   | 11-Nov | Veteran’s Day – No class | | |
| 13-Nov | Prepare for PD | Trail run PD | 2nd reflection | |
| 18-Nov | PD prep | Trail run debriefing and PD prep | |
| 18-Nov | PD G2: Adapting land management in the SW in the face of changing climatic conditions &amp; increased wildfire risk – MNA, Flagstaff, 6 p.m. (be there at 5:30) | | |
| 20-Nov | PD prep second go around | Debriefing and discussion of first G2 PD | |
| 20-Nov | PD G2: Adapting land management in the SW in the face of changing climatic conditions &amp; increased wildfire risk – La Posada, Winslow AZ, 6 p.m. (be there at 5:30) | | |</p>
<table>
<thead>
<tr>
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<tr>
<td></td>
<td>27-Nov</td>
<td>No class - Thanksgiving</td>
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<tr>
<td>15</td>
<td>2-Dec</td>
<td>Climate change and disease</td>
<td>Discussion</td>
<td>Rosenzweig, E., “As Earth warms up, tropical virus moves to Italy,” <em>NY Times</em>, 2007</td>
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<td>2P-reflection</td>
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<tr>
<td>16</td>
<td>9-Dec</td>
<td>Last day of instruction</td>
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</table>
FAST TRACK  (Select if this will be a fast track item. Refer to Fast Track Policy 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.

1. College: CEFNS  2. Academic Unit: School of Earth Sciences and Environmental Sustainability

3. Academic Plan Name: Climate Science and Solutions; M.S. (CLSCSMS)  4. Emphasis: N/A

5. Plan proposal:  
- [ ] Plan Change  
- [ ] Plan Deletion  
  - [ ] New Emphasis  
  - [ ] Emphasis Change  
  - [ ] Emphasis Deletion

6. Current student learning outcomes of the plan. If structured as plan/emphasis, include for both core and emphasis.

The Master of Science degree in Climate Science and Solutions will give you the academic background and the professional skills needed in sectors of the economy dealing with sustainability, climate mitigation, and carbon markets. In this non-thesis 36-unit program, you

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).*

The Master of Science degree in Climate Science and Solutions will give you the academic background and the professional skills needed in sectors of the economy dealing with sustainability, climate mitigation, and carbon markets. In this
will learn:
- the science behind climate change,
- the policy basis of climate change mitigation, and
- the fundamentals of greenhouse-gas accounting

Around the core curriculum of climate science and economics, topics in environmental sustainability, and greenhouse gas science and management, you will select electives to create an emphasis oriented toward your interests in engineering, policy, or economic approaches to climate solutions. A key component of the program is the summer internship that will provide you with 6 units of professional development through on-site direct experiences with a private firm, government agency, or non-governmental organization that works in the carbon management and market sector.

The Climate Science and Solutions (CSS) Professional Science Master’s (PSM) program is designed to train students in the scientific basis of global climate change while also helping students to develop highly valued industry-relevant skills. This 36-credit hour (18 month) non-thesis based masters program has been developed in consultation with an advisory board of professionals to ensure the program meets current and anticipated workforce needs.

Program Learning Objectives:
- Understand and explain the physical nature of global climate change;
- Apply national and international standards to conduct professional entity-level project-based greenhouse gas inventories;
- Evaluate the social and economic externalities of climate change;
- Describe the ethical, scientific, and policy strengths and weaknesses of current and proposed mitigation and adaptation strategies; and
- Identify, analyze, synthesize, and communicate scientific information and uncertainties for public and professional audiences.
- Participate in a professional internship and identify a career path that meets the needs of the growing climate industry.
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/](http://catalog.nau.edu/Catalog/)

**Climate Science and Solutions, M.S.**

In addition to University Requirements:

- Complete individual plan requirements.

<table>
<thead>
<tr>
<th>Minimum Units for Completion</th>
<th>36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Admission</td>
<td>Admission requirements over and above admission to NAU are required.</td>
</tr>
<tr>
<td>Requirements</td>
<td>Additional Admission Requirements</td>
</tr>
<tr>
<td>Additional Fees/Program Fees</td>
<td>Required</td>
</tr>
<tr>
<td>Program of Study</td>
<td>View Program of Study</td>
</tr>
</tbody>
</table>

**Additional Admission Requirements**

Admission requirements over and above admission to NAU are required.

- NAU Graduate Online application required ([www.nau.edu/graduateapply](http://www.nau.edu/graduateapply)) for all programs. Details on admission requirements are included in the online application.
- Undergraduate degree from a regionally accredited institution
- Grade Point Average (GPA) of 3.00 (scale is 4.00 = "A"), or the equivalent.
- Admission to many graduate programs is on a competitive basis, and programs may have higher standards than those established by the Graduate College.
- Transcripts
- For details on graduate admission policies, please visit [http://nau.edu/GradCol/Admissions/Graduate-Admissions-Policy/](http://nau.edu/GradCol/Admissions/Graduate-Admissions-Policy/)
- International applicants have additional admission requirements: [http://nau.edu/GradCol/Admissions/International/](http://nau.edu/GradCol/Admissions/International/).

Individual program admission requirements include:

- 3 letters of recommendation
- Personal statement or essay
- Resume or Curriculum Vitae

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.

**Climate Science and Solutions, M.S.**

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Individual program admission requirements include:

- 3 letters of recommendation
- Personal statement or essay
- Resume or Curriculum Vitae

Effective Fall 2013
Master's Requirements

Take the following 36 units:
The Program Core (15 Units)
- EGR 501 (3 units)
- ENV 591, ENV 595, ENV 698 (9 units)
- FOR 593 (3 units)
The Track (15 units)
Select courses from the following list in consultation with graduate advisors:
- BIO 426C, BIO 479, BIO 578
- CENE 502, CENE 540, CENE 543, CENE 562, CENE 568
- ENV 530, ENV 550, ENV 555, ENV 571, ENV 596, ENV 650
- FOR 500, FOR 504, FOR 563, FOR 565, FOR 580, FOR 582, FOR 633
- GLG 575, GLG 596, GLG 670
- ME 451, ME 535, ME 540, ME 555
- POS 659
- STA 570, STA 571
Fieldwork Experience (6 units)
- ENV 608 (6 units)

Please note that this requirement involves a full-time summer fieldwork experience that will provide you with professional training through practical experiences with a private firm, government agency, or non-governmental organization working in the carbon management and market sector. You will work with your academic advisor and fieldwork supervisor to design an experience that will enhance your job skills and develop employment contacts to prepare you for a professional position in this field.

A maximum of two courses, up to 6 units, may be at the 400-level.

Be aware that some courses may have prerequisites that you must also take. For prerequisite information click on the course or see your advisor.

Effective Fall 2013

Master's Requirements

Take the following 36 units:
The Program Core (15 Units)
- EGR 501 (3 units)
- ENV 591, ENV 595, **ENV 698 ENV 675** (9 12 units)

*You will take ENV 675 three times for a total of 6 units*
- FOR 593 **ECO 526** (3 units)
The Track (15 units)
Select courses from the following list in consultation with graduate advisors:
- BIO 426C, BIO 479, BIO 578
- CENE 502, CENE 540, CENE 543, CENE 562, CENE 568
- ENV 530, ENV 550, ENV 555, ENV 571, ENV 596, ENV 650
- FOR 500, FOR 504, FOR 563, FOR 565, FOR 580, FOR 582, FOR 633
- GLG 575, GLG 596, GLG 670
- ME 451, ME 535, ME 540, ME 555
- POS 659
- STA 570, STA 571
Fieldwork Experience (6 units)
- ENV 608 (6 units)

Please note that this requirement involves a full-time summer fieldwork experience that will provide you with professional training through practical experiences with a private firm, government agency, or non-governmental organization working in the carbon management and market sector. You will work with your academic advisor and fieldwork supervisor **the CSS career coordinator** to design an experience that will enhance your job skills and develop employment contacts to prepare you for a professional position in this field.

A maximum of two courses, up to 6 units, may be at the 400-level.

Be aware that some courses may have prerequisites that you must also take. For prerequisite information click on the course or see your advisor.
8. Justification for proposal:
The proposed program revisions are needed to update the CSS degree program learning objectives (6) to be consistent with those recently submitted to the Graduate College. The proposed program revisions also update the program of study (7) to account for: (1) the new core course ENV675, which replaces the temporary seminar ENV698 (not a permanent class line); (2) the replacement of FOR593 with the new course ECO526 Natural Resource Economics (was ECO599 Climate and Energy Economics; not a permanent class line). ECO526 was created specifically to support the CSS degree program as a core course; and (3) changes in the credit hours of the program core and track in response to the addition of ENV675 to the core (increase core from 15 credit hours to 18 credit hours).

9. NCATE designation, if applicable:  
   □ Initial Plan  □ Advanced Plan  □ Remove Designation

    See effective dates calendar.

11. Will this proposal impact other plans, sub plans, or course offerings, etc.?  Yes □ No □  
    If yes, describe the impact. If applicable, include evidence of notification to and/or response from each impacted academic unit  
    ECO 526 will replace FOR 593 in the Climate Science and Solutions; MS. See attached notification.

**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 □ 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.
# FLAGSTAFF MOUNTAIN CAMPUS

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Scott Galland</td>
<td>2/3/2014</td>
</tr>
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**Reviewed by Curriculum Process Associate**

**Approvals:**

<table>
<thead>
<tr>
<th>Position</th>
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<tbody>
<tr>
<td>Department Chair/Unit Head (if appropriate)</td>
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<tr>
<td>Chair of college curriculum committee</td>
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<td>Dean of college</td>
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**For Committee use only:**

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<td>UCC/UGC Approval</td>
<td>3/12/14</td>
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**Approved as submitted:**

- Yes ☐
- No ☐

**Approved as modified:**

- Yes ☐
- No ☐

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# EXTENDED CAMPUS

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<tr>
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**Effective Fall 2013**
## FLAGSTAFF MOUNTAIN CAMPUS

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**Approved as submitted:**

Yes [ ]  No [ ]

**Approved as modified:**

Yes [ ]  No [ ]

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| Faculty Chair of Extended Campuses Curriculum Committee (Yuma, Yavapai, or Personalized Learning) | Date |

**Effective Fall 2013**
### FLAGSTAFF MOUNTAIN CAMPUS

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Review by Curriculum Process Associate  
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**Approved as submitted:**  
Yes □ No □

**Approved as modified:**  
Yes □ No □

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**Effective Fall 2013**
Hi Jim,

This message is to notify you that the School of Earth Science and Environmental Sustainability is proposing to remove FOR 593 from the Climate Science and Solutions MS (please see below).

Thank you!

Scott Galland
Curriculum Process Associate
Office of Curriculum, Learning Design, and Academic Assessment
928-523-1753
928-699-9147 (cell)
scott.galland@nau.edu

Hi Scott,

Thanks for letting me know. As far as I can tell, it has been effectively removed for the past couple of years, anyway.

Best wishes,
Jim

James A. Allen, Professor and Executive Director
School of Forestry
College of Engineering, Forestry and Natural Sciences
Northern Arizona University
P.O. Box 15018
Flagstaff, AZ 86011-5018
Office Phone: 928-523-5894
Fax: 928-523-1080
School of Forestry

Effective Fall 2013
MS in Climate Science and Solutions

School of Earth Sciences and Environmental Sustainability
College of Engineering, Forestry, and Natural Sciences
Northern Arizona University

PROGRAM OF STUDY

<table>
<thead>
<tr>
<th>Program Core (18 credit hours) Required courses you must take to complete the degree program</th>
<th>Credit Hours</th>
<th>Semester Typically offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>ECO 526: Applied Environmental Economics</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>EGR 501: Topics in Sustainable Systems</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 591: Science &amp; Management of Greenhouse Gases</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>ENV 595: Global &amp; Environ. Climate Change</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 675: Topics in Environmental Discourse</td>
<td>2x3</td>
<td>Fall and Spring</td>
</tr>
</tbody>
</table>

Program Elective Courses (12 credit hours) Choose classes in consultation with the CSS graduate coordinator. A maximum of 6 credits of non-CEFNS courses and/or 6 credits of 400-level courses are allowed. A few suggested courses are provided below. With the approval of the CSS grad coordinator, you can take elective courses not mentioned in the list below.

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hours</th>
<th>Semester Typically offered</th>
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<tbody>
<tr>
<td>ENV 540: Conservation Biology</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 550: Historical Ecology</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 555: Science / Policy Interface</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>ENV 650: Global Resource Conservation</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>STA 570: Statistical Methods I</td>
<td>3</td>
<td>Fall and Spring</td>
</tr>
<tr>
<td>STA 571: Statistical Methods II</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>BIO 426: Plants and Climate</td>
<td>3</td>
<td>Spring</td>
</tr>
<tr>
<td>BIO 479: Ecosystems &amp; Climate Change</td>
<td>3</td>
<td>Spring, even yrs</td>
</tr>
<tr>
<td>FOR 525: GIS and Spatial Techniques in Forestry</td>
<td>3</td>
<td>Fall</td>
</tr>
<tr>
<td>GSP 531: Foundations I: Map Design and GIS</td>
<td>4</td>
<td>Fall</td>
</tr>
<tr>
<td>ME 451: Renewable Energy*</td>
<td>3</td>
<td>Fall, odd years</td>
</tr>
<tr>
<td>ME 535: Wind Energy Engineering*</td>
<td>3</td>
<td>Fall</td>
</tr>
</tbody>
</table>

Professional development and internship (6 credit hours) Required courses you must take to complete the degree program

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<th>Course</th>
<th>Credit Hours</th>
<th>Semester Typically offered</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENV 608: Fieldwork Experience</td>
<td>1</td>
<td>First Fall</td>
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<tr>
<td>ENV 608: Fieldwork Experience</td>
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<td>Spring</td>
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<tr>
<td>ENV 608: Fieldwork Experience</td>
<td>3</td>
<td>Summer</td>
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<tr>
<td>ENV 608: Fieldwork Experience</td>
<td>1</td>
<td>Last Fall</td>
</tr>
</tbody>
</table>

* Engineering pre-requisites required
MS in Climate Science and Solutions

PROGRAM OF STUDY WORKSHEET

Name:
NAU ID#
Entry Date:
Expected Graduation:

<table>
<thead>
<tr>
<th>Course</th>
<th>Credit Hrs</th>
<th>Semester Taken</th>
<th>Year Taken</th>
<th>Grade Received</th>
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<td></td>
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<tr>
<td>ECO 599: Climate &amp; Energy Economics</td>
<td>3</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV 591: Science &amp; Management of Greenhouse Gases</td>
<td>3</td>
<td>Spring</td>
<td></td>
<td></td>
</tr>
<tr>
<td>EGR 501: Topics in Sustainable Systems</td>
<td>3</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV 675: Topics in Environmental Discourse</td>
<td>2</td>
<td>Fall</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENV 675: Topics in Environmental Discourse</td>
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<td><strong>Program Elective Courses (12 credit hours)</strong> Choose classes in consultation with the CSS graduate coordinator. A maximum of 6 credits of non-CEFNS courses and/or 6 credits of 400-level courses are allowed.</td>
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<tr>
<td>ENV 608: Fieldwork Experience</td>
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<td>1</td>
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<td></td>
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36 total credit hours are required for the CSS degree
Total graduate hours completed toward degree:
Total graduate hours in progress toward degree:
Total degree credit hours applied and in-progress
FAST TRACK (Select if this will be a fast track item. Refer to Fast Track Policy 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.

1. College: CEFNS
   2. Academic Unit: SESES

3. Academic Plan Name: Environmental Sciences & Policy; M.S. (ENVSCIPOMS)

4. Emphasis: Environmental Sciences and Policy (ENSCPOM) Paleoenvironmental Sciences Emphasis (PALEOSCIM)


6. Current student learning outcomes of the plan. If structured as plan/emphasis, include for both core and emphasis.

The Environmental Sciences and Policy masters degree will prepare students to:
- Develop the knowledge and skills to effectively integrate different disciplines of the natural sciences and social sciences, and develop solutions to environmental problems
- Learn to effectively design and complete professional level research

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](#)).

UNCHANGED

Effective Fall 2013
- Develop skills in oral and written communication to articulate ideas and arguments clearly and effectively to policymakers and resource managers

Paleoenvironmental emphasis:
- Develop the knowledge and skills to effectively integrate different disciplines of the natural and social sciences to reconstruct and understand environmental change on short and long time scales
- Learn to effectively design and complete professional level research
- Develop skills in oral and written communication to articulate ideas and arguments effectively to policymakers and resource managers

Effective Fall 2013
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 and Policy; M.S.
In addition to University Requirements:

- Complete individual plan requirements.

<table>
<thead>
<tr>
<th>Minimum Units for Completion</th>
<th>34 - 36</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Admission Requirements</td>
<td>Admission requirements over and above admission to NAU are required.</td>
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<tr>
<td>Emphasis, Minor, Certificate</td>
<td>Emphasis, minor, and/or certificate are required.</td>
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<tr>
<td>Thesis</td>
<td>Thesis is required.</td>
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<tr>
<td>Oral Defense</td>
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<tr>
<td>Research</td>
<td>Individualized research is required.</td>
</tr>
<tr>
<td>Program of Study</td>
<td>View Program of Study</td>
</tr>
</tbody>
</table>

**Additional Admission Requirements**

Admission requirements over and above admission to NAU are required.

- NAU Graduate Online application required (www.nau.edu/graduateapply) for all programs. Details on admission requirements are included in the online application.
- Undergraduate degree from a regionally accredited institution
- Grade Point Average (GPA) of 3.00 (scale is 4.00 = "A"), or the equivalent.
- Admission to many graduate programs is on a competitive basis, and programs may have higher standards than those established by the Graduate College.
- Transcripts
- For details on graduate admission policies, please visit http://nau.edu/GradCol/Admissions/Graduate-Admissions-Policy/.
- International applicants have additional admission requirements: http://nau.edu/GradCol/Admissions/International/.

Individual program admission requirements include:

---

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 and Policy; M.S.
In addition to University Requirements:

- Complete individual plan requirements.

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Individual program admission requirements include:

---

Effective Fall 2013
- GRE® revised General Test
- 3 letters of recommendation
- Prerequisites (may be completed concurrently with the program)
  - Science prerequisites include at least one undergraduate chemistry, biology, or ecology course with a lab, though it is possible to be admitted provisionally while completing foundational coursework
- Resume or Curriculum Vitae

Master's Requirements
Take the following 34 - 36 units:
Core (12 units)
- ENV 555 (3 units)
Select at least one course in quantitative analysis from (3 units):
  - BIO 682
  - MAT 542, MAT 543
  - POS 601, POS 605
  - STA 570, STA 571, STA 676
- ENV 699 (6 units)
In completing the thesis, you will work closely with your major professor and others to conduct an original research project, which generally requires maintaining close proximity to the Northern Arizona University - Flagstaff campus.

Emphasis Requirements (Select One):
Environmental Science and Policy Emphasis (24 units)
- Select one course each from two of the following areas (6 units):
  - Water Resources:
    - BIO 572
    - FOR 506, FOR 563
    - GLG 451, GLG 575, GLG 670
  - Atmosphere and Climate:
    - CHM 440
    - ENV 430, ENV 580, ENV 595, ENV 596
  - Land Resources:
    - BIO 570, BIO 573, BIO 660, BIO 663
    - ENV 530, ENV 540, ENV 540L, ENV 544, ENV 640
    - FOR 580, FOR 582
    - [GLG 430]
- Select one course in environmental laws.

Effective Fall 2013

- GRE® revised General Test
- 3 letters of recommendation
- Prerequisites (may be completed concurrently with the program)
  - Science prerequisites include at least one undergraduate chemistry, biology, or ecology course with a lab, though it is possible to be admitted provisionally while completing foundational coursework
- Resume or Curriculum Vitae

Master's Requirements
Take the following 34 - 36 units:
Core (12 units)
- ENV 555 (3 units)
Select at least one course in quantitative analysis from (3 units):
  - BIO 682
  - MAT 542, MAT 543
  - POS 601, POS 605
  - STA 570, STA 571, STA 676
- EES 605, EES 606 (2 units)
- ENV 699 (6 7 units)
In completing the thesis, you will work closely with your major professor and others to conduct an original research project, which generally requires maintaining close proximity to the Northern Arizona University - Flagstaff campus.

Emphasis Requirements (Select One):
Environmental Science and Policy Emphasis (24 units)
- Select one course each from two of the following areas (6 units):
  - Water Resources:
    - FOR 506, FOR 560, FOR 563, FOR 565
    - GLG 451, GLG 575, GLG 670
  - Atmosphere and Climate:
    - CHM 440
    - ENV 430, ENV 580, ENV 591, ENV 595, ENV 596, ENV 675
  - Land Resources:
    - BIO 570, BIO 573, BIO 660, BIO 663
    - ENV 530, ENV 540, ENV 540L, ENV 544, ENV 640
    - ENV 550, ENV 571, ENV 640
regulations, and policy selected from (3 units):
  - CENE 540
  - ENV 520
  - FOR 593, FOR 605, FOR 633
  - POS 659
- Select at least 15 units of specialty courses, at the 500 level or above, chosen in consultation with your Program Committee.

Paleoenvironmental Sciences Emphasis (22-23 units)
Select one course each from the following areas (12-13 units):
Quaternary Geology:
  - GLG 537
Paleoecology:
  - ENV 550, ENV 572
Climatology/Paleoclimatology:
  - ENV 595, ENV 596
Human Systems:
  - ANT 517, ANT 550, ANT 552, ANT 554, ANT 555, ANT 635, ANT 636
- Select at least 10 units of specialty courses, at the 500 level or above, chosen in consultation with your Program Committee.

Be aware that some courses may have prerequisites that you must also take. For prerequisite information click on the course or see your advisor.

FOR 544, FOR 545, FOR 580, FOR 582
- Select one course in environmental laws, regulations, and policy selected from (3 units):
  - CENE 540
  - ENV 520
  - FOR 573, FOR 593, FOR 605, FOR 633
  - GSP 514, GSP 521, GSP 522, GSP 524, GSP 698
  - POS 659
- Select at least 15 units of specialty courses, at the 500 level or above, chosen in consultation with your Program Committee.

Paleoenvironmental Sciences Emphasis (22-23 units)
Select one course each from the following areas (12-13 units):
Quaternary Geology:
  - GLG 537
Paleoecology:
  - ENV 550, ENV 572
Climatology/Paleoclimatology:
  - ENV 595, ENV 596, ENV 675
Human Systems:
  - ANT 517, ANT 550, ANT 552, ANT 554, ANT 555, ANT 635, ANT 636
- Select at least 15 units of specialty courses, at the 500 level or above, chosen in consultation with your Program Committee.

Be aware that some courses may have prerequisites that you must also take. For prerequisite information click on the course or see your advisor.

8. Justification for proposal:
This proposal would divide the Environmental Sciences and Policy MS degree into two emphasis areas: (1) Science and Policy, and (2) Paleoenvironmental Sciences. This represents a merger of two programs, the existing Environmental Sciences and Policy emphasis area and the former Quaternary Sciences MS degree (QSP). Although the QSP has had a modest but consistent enrollment in the last few years, a question has been raised whether it should remain a distinct MS degree program. However, steady interest in the study of former environments continues as a means of understanding (1) potential analogs to future climates in the face of global change, and (2) the natural range of variability of ecological systems, human dimensions, and physical processes.

Effective Fall 2013
The changes to the Environmental Sciences and Policy degree are a result of four factors: (1) the need to reflect changes in course prefixes or numbering, and new offerings across the graduate curriculum that have not been made in prior catalog revisions, (2) difficulties encountered by students attempting to complete the emphasis requirements in two years because courses were being taught infrequently, (3) the increasingly interdisciplinary background and course needs of students admitted to the degree program, and (4) the need to conform with UGC/ABOR curricular definitions.

9. NCATE designation, if applicable:
   - Initial Plan
   - Advanced Plan
   - Remove Designation

    See effective dates calendar.

11. Will this proposal impact other plans, sub plans, or course offerings, etc.? Yes ☒ No ☐
    If yes, describe the impact. If applicable, include evidence of notification to and/or response from each impacted academic unit.
    See attached notification to/support from: FOR, GSP

**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 ☒ 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.

**FLAGSTAFF MOUNTAIN CAMPUS**

Scott Galland 3/12/2014

Effective Fall 2013
Reviewed by Curriculum Process Associate

Approvals:

Department Chair/Unit Head (if appropriate)  
Date: 12/9/13

Chair of college curriculum committee
Date: 12/9/13

Dean of college
Date:

For Committee use only:
Date: 3/12/14

UCC/UGC Approval

Approved as submitted: Yes ☐ No ☐

Approved as modified: Yes ☐ No ☐

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 ☐

Effective Fall 2013
**Review and Approval**

**For College Use Only:**

<table>
<thead>
<tr>
<th>Position</th>
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<tbody>
<tr>
<td>Reviewed by Curriculum Process Associate</td>
<td>Date</td>
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<tr>
<td>Approvals:</td>
<td></td>
</tr>
<tr>
<td>Paul Umhoefer</td>
<td>03/28/2014</td>
</tr>
<tr>
<td>Department Chair/Unit Head (if appropriate)</td>
<td>Date</td>
</tr>
<tr>
<td>Chair of college curriculum committee</td>
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**Approved as submitted:**

- Yes [ ]
- No [ ]

**Approved as modified:**

- Yes [ ]
- No [ ]

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</tbody>
</table>

**Approved as submitted:**

- Yes [ ]
- No [ ]

**Effective Fall 2013**
From: Paul Umhoefer
Sent: Thursday, March 27, 2014 2:49 PM
To: Stuart S Galland
Cc: Deborah Nicole Huntzinger; Jacqueline Vaughn
Subject: Re: SESES tabled

Signed by Umhoefer

Paul

Paul Umhoefer
Director and Professor of Geology
School of Earth Sciences & Environmental Sustainability
625 S. Kinlaxes Drive
Flagstaff, AZ 86011-0001
928-523-1637 (Director office - call first)
928-523-8464 (research office)

Effective Fall 2013
From: Stuart S Galland  
Sent: Wednesday, December 04, 2013 11:35 AM  
To: James A Allen; Thomas Paradis  
Subject: MS Environmental Sciences & Policy proposed changes

HI, 

This email is to notify you that the School of Environmental Sciences and Environmental Sustainability is proposing to remove/add your courses from their plan (emphasis) requirements;

- Drop FOR 506 and Add FOR 544, 545, 560, 565, 573  
- Drop GLG 430(?) and Add GSP 521, 522, 524, 525, 574, 678

(see below highlighted in YELLOW)

Please let me know if you support their proposal, or if you need any additional information from me.

Thanks!

Scott Galland  
Curriculum Process Associate
Office of Curriculum, Learning Design, and Academic Assessment  
928-523-1753  
928-699-9147 (cell)  
scott.galland@nau.edu

From: James A Allen  
Sent: Wednesday, December 04, 2013 2:35 PM  
To: Stuart S Galland  
Subject: RE: MS Environmental Sciences & Policy proposed changes

Hi again, Scott. This also looks fine to me.

Best wishes,

Jim  
James A. Allen, Professor and Executive Director  
School of Forestry  
College of Engineering, Forestry and Natural Sciences  
Northern Arizona University  
P.O. Box 15018  
Flagstaff, AZ 86011-5018  
Office Phone: 928-523-5894  
Fax: 928-523-1080  
School of Forestry

From: Thomas Paradis  
Sent: Wednesday, December 04, 2013 1:05 PM  
To: Stuart S Galland  
Subject: RE: MS Environmental Sciences & Policy proposed changes

Hi Scott,

Actually, GSP 522 and 524 are rarely taught (though still in the catalog), and GSP 525, 574, and 678 are no longer taught (nor should they be in the catalog – we deleted these a few years ago, though may still show up as “active” status somewhere?).

They might want to re-think this list.

Thanks, Tom

Tom Paradis  
Professor and Chair  
President's Distinguished Teaching Fellow

Effective Fall 2013
From: jacquelinevaughn@gmail.com [mailto:jacquelinevaughn@gmail.com] On Behalf Of Jacqueline Vaughn
Sent: Thursday, December 05, 2013 5:29 PM
To: Stuart S Galland
Subject: Re: FW: MS Environmental Sciences & Policy proposed changes
Well I guess we can start by deleting GSP 525, 574, and 678 from our list of courses. I'll see what the faculty want to do about GSP 522 and 524.

From: Stuart S Galland
Sent: Monday, December 09, 2013 9:44 AM
To: Thomas Paradis
Subject: RE: MS Environmental Sciences & Policy proposed changes
Hi Tom,
They have revised their list and now propose:
- Drop GLG 430(?) and Add GSP 514, 521, 522, 524, 698
Would this be acceptable??
Thanks!

Scott Galland
Curriculum Process Associate
Office of Curriculum, Learning Design, and Academic Assessment
928-523-1753
928-699-9147 (cell)
scott.galland@nau.edu

From: Thomas Paradis
Sent: Monday, December 09, 2013 10:19 AM
To: Stuart S Galland
Subject: RE: MS Environmental Sciences & Policy proposed changes
Scott, this should be acceptable, with GSP 514 being taught the most often (in person and online). Tom
# Master of Science in Environmental Sciences and Policy

## School of Earth Sciences and Environmental Sustainability

**PROGRAM OF STUDY (2014-15)**

<table>
<thead>
<tr>
<th>Student’s Name:</th>
<th>NAU ID:</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail Address:</td>
<td>Phone Number:</td>
</tr>
<tr>
<td>Advisor:</td>
<td></td>
</tr>
</tbody>
</table>

**Total Required Credits for this Degree Program:** 34-36

This is the: [ ] Initial (upon admission) [ ] Final (submitted with Graduation Application) 

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Replacement Course</th>
<th>Semester</th>
<th>Year</th>
<th>Hours</th>
<th>Grade</th>
<th>T/E/P**</th>
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</thead>
<tbody>
<tr>
<td><strong>The Program Core for both the Science and Policy Emphasis and the Paleoenvironmental Sciences Emphasis (15 credit hours required)</strong></td>
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<tr>
<td>* ENV 555</td>
<td>The Environmental Science-Policy Interface</td>
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<tr>
<td><strong>Quantitative Analysis and Research (5-7 hours required)</strong></td>
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<td>BIO 682</td>
<td>Quantitative Biology</td>
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<td>* EES 605</td>
<td>Regional Topics in Earth and Environmental Science and Policy</td>
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<td>* EES 606</td>
<td>Research Methods in Earth and Environmental Science</td>
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<tr>
<td>MAT 542/543</td>
<td>Wildlife Population Modeling and Lab (3-5 units)</td>
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<td>POS 601</td>
<td>Research Methods/Analysis</td>
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<td>POS 605</td>
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<td>STA 570</td>
<td>Statistical Methods I</td>
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<td>STA 571</td>
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<td>* ENV 699</td>
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</table>

*Required

Revised: jv/12/2/13
Students may choose either the Science and Policy Emphasis or the Paleoenvironmental Sciences Emphasis.

Science and Policy Emphasis (21 units): Take one course each from two of the three areas listed below (6 credit hours required)

<table>
<thead>
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<td><strong>Water Resources:</strong></td>
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<tr>
<td>BIO 572</td>
<td>Limnology</td>
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<tr>
<td>FOR 560</td>
<td>Wetland Ecology and Management</td>
</tr>
<tr>
<td>FOR 563</td>
<td>Watershed Hydrology</td>
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<tr>
<td>FOR 565</td>
<td>Watershed Restoration</td>
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<tr>
<td>GLG 451</td>
<td>Hydrogeology</td>
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<tr>
<td>GLG 575</td>
<td>Geochemistry of Natural Waters</td>
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<tr>
<td>GLG 670</td>
<td>Advanced Hydrogeology</td>
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<td><strong>Atmosphere and Climate:</strong></td>
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<td>CHM 440/ENV 430</td>
<td>Environmental Chemistry</td>
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<tr>
<td>ENV 580</td>
<td>Atmospheric Change</td>
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<tr>
<td>ENV 591</td>
<td>Science and Management of Greenhouse Gases</td>
</tr>
<tr>
<td>ENV 595</td>
<td>Global Environmental/ Climate Change</td>
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<tr>
<td>ENV 596</td>
<td>Quaternary Climate Change</td>
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<tr>
<td>ENV 675</td>
<td>Topics in Environmental Discourse</td>
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<td><strong>Land Resources:</strong></td>
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<td>BIO 570</td>
<td>Plant Ecology</td>
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<td>BIO 573</td>
<td>Field Ecology</td>
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<td>BIO 660</td>
<td>Organic Evolution</td>
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<td>BIO 663</td>
<td>Biogeography</td>
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<td>ENV 530</td>
<td>Arid Lands Geomorphology</td>
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<td>ENV 540 &amp; 540L</td>
<td>Conservation Biology and Lab</td>
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<tr>
<td>ENV 544</td>
<td>Landscape Ecology</td>
</tr>
<tr>
<td>ENV 550</td>
<td>Historical Ecology</td>
</tr>
<tr>
<td>ENV 571</td>
<td>Microbial Ecology</td>
</tr>
<tr>
<td>ENV 640</td>
<td>Ecological Assessment and Monitoring</td>
</tr>
<tr>
<td>FOR 544</td>
<td>Landscape Ecology</td>
</tr>
<tr>
<td>FOR 545</td>
<td>Rangeland Ecology and Management</td>
</tr>
<tr>
<td>FOR 580</td>
<td>Ecological Restoration Principles</td>
</tr>
<tr>
<td>FOR 582</td>
<td>Ecological Restoration Applications</td>
</tr>
</tbody>
</table>

*Required
Environmental Laws, Regulations, and Policy. Choose one course from the list below. (3 credit hours required)

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>CENE 540</td>
<td>Environmental Protection</td>
</tr>
<tr>
<td>ENV 520</td>
<td>Collaboration in Environmental Management</td>
</tr>
<tr>
<td>FOR 573</td>
<td>Human Dimensions of Natural Resource Management</td>
</tr>
<tr>
<td>FOR 593</td>
<td>Natural Resource Economics</td>
</tr>
<tr>
<td>FOR 605</td>
<td>Policy Process in Multi-Resource Management</td>
</tr>
<tr>
<td>FOR 633</td>
<td>Ecological Economics</td>
</tr>
<tr>
<td>GSP 514</td>
<td>Planning Sustainable Communities</td>
</tr>
<tr>
<td>GSP 521</td>
<td>Land Use Planning and Ethics</td>
</tr>
<tr>
<td>GSP 522</td>
<td>Fundamentals of Development Law and Community Sustainability</td>
</tr>
<tr>
<td>GSP 524</td>
<td>Fundamentals of Environmental Law</td>
</tr>
<tr>
<td>GSP 698</td>
<td>Seminar in Rural Geography</td>
</tr>
<tr>
<td>POS 659</td>
<td>Environmental Policy</td>
</tr>
</tbody>
</table>

Specialty Courses, chosen in consultation with your committee (12 credit hours required)

Paleoenvironmental Sciences Emphasis (19-20 units)

I. Interdisciplinary content courses. Take one course each from each of the three areas listed below. (12-13 credit hours required)

a) Quaternary Geology
   - GLG 537 Quaternary Geology

b) Paleoecology
   - ENV 550 Historical Ecology
   - ENV 572 Quaternary Pollen Analysis

c) Climatology/Paleoclimatology
   - ENV 595 Global Environmental and Climate Change
   - ENV 596 Quaternary Climate Change
   - ENV 675 Topics in Environmental Discourse
<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Replacement Course</th>
<th>Semester</th>
<th>Year</th>
<th>Hours</th>
<th>Grade</th>
<th>T/E/P**</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANT 517</td>
<td>Southwestern Archaeology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANT 550</td>
<td>Analysis of Archaeological Materials</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANT 552</td>
<td>Ceramic Analysis</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANT 554</td>
<td>Paleoethnobotany</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ANT 555</td>
<td>Lithic Analysis</td>
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<tr>
<td>ANT 635</td>
<td>Archeological Theory</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>ANT 636</td>
<td>Archaeological Methods and Inference</td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

**II. Specialty Courses. Chosen in consultation with your committee. (7 credit hours required)**

*Student’s Signature: _____________________________ Date: ____________

*Advisor’s Signature: _____________________________ Date: ____________

*Graduate Coordinator’s Signature: ________________ Date: ____________

**Transfer/Equivalent/Previous Graduate Degree

Transfer  T = Course transferred from another university
Previous Graduate Degree  P = Course taken at NAU from previous graduate degree
Equivalent  E = Course taken at NAU in place of required course. Must have Advisor approval.

Transfer Credit Example:

<table>
<thead>
<tr>
<th>Course No.</th>
<th>Course Title</th>
<th>Replacement Course</th>
<th>Semester</th>
<th>Year</th>
<th>Hours</th>
<th>Grade</th>
<th>T/E/P**</th>
</tr>
</thead>
<tbody>
<tr>
<td>ABC 123</td>
<td>Fundamentals of English</td>
<td>ASU 456</td>
<td>Fall</td>
<td>2012</td>
<td>3</td>
<td>A</td>
<td>T/ASU</td>
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<tr>
<td>Course Title</td>
<td>Code</td>
<td>Year</td>
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<td></td>
<td></td>
<td></td>
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<tr>
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<td></td>
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</tr>
<tr>
<td>Dead State Course, Remove co-convene</td>
<td></td>
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<td></td>
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</tr>
<tr>
<td>Research in Latin American History</td>
<td>3</td>
<td>680</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Research in Environment and Economy</td>
<td>3</td>
<td>689</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research in Power, Culture, and Ideology</td>
<td>3</td>
<td>690</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research in Gender, Race &amp; Class</td>
<td>3</td>
<td>691</td>
<td></td>
<td></td>
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<tr>
<td>Research in Colonialism and Nationalism</td>
<td>3</td>
<td>692</td>
<td></td>
<td></td>
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<tr>
<td>Research in Comparative History</td>
<td>3</td>
<td>693</td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Research in European History</td>
<td>3</td>
<td>694</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Research in Ancient History</td>
<td>3</td>
<td>695</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Research in Native American History</td>
<td>3</td>
<td>696</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Readings in Comparative History</td>
<td>3</td>
<td>697</td>
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</tr>
<tr>
<td>A. College of Arts and Letters</td>
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<td></td>
</tr>
<tr>
<td>1. Fast Track</td>
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</tr>
</tbody>
</table>
If the changes included in this proposal are significant, attach copies of original and proposed syllabi in approved university format.

1. Course subject and number: **HIS 550**  
2. Units: **3**  
   
   See upper and lower division undergraduate course definitions.

3. College: **Arts and Letters**  
4. Academic Unit: **History**  

5. Current Student Learning Outcomes of the course.

   Students will become proficient at exchanging ideas orally, in writing, and electronically.

   Students will gain confidence in their ability to evaluate the merits and defects of historical arguments and to frame new arguments in response.

   Students will become proficient in the techniques of strategic argumentation which look not only for the thesis or argument, but for who or what provoked it---the points of controversy---and for ways to enter into it.

   Students will learn to conduct independent research in history at the Masters thesis level that will make a new contribution to knowledge.

   Students will become well grounded in basic issues in medicine and culture and in a topic of particular interest to them within this field.

   Show the proposed changes in this column (if applicable). Bold the proposed changes in this column to differentiate from what is not changing, and Bold with strikethrough what is being deleted. *(Resources & Examples for Developing Course Learning Outcomes)*

   **UNCHANGED**

6. Current title, description and units. Cut and paste, in its entirety, from the current on-line

   Show the proposed changes in this column **Bold** the proposed changes in this column to differentiate

**Effective Fall 2013**
HIS 550 READINGS IN COMPARATIVE HISTORY (3)
Description: Specific topics in comparative historical methods, regions, and themes, such as comparative methodologies, colonization, modernization, gender systems, nationalism, ethogenesis among indigenous peoples, and identity and class formation. Co-convenes with HIS 650. Letter grade only. May be repeated for up to 6 units of credit.
Units: 3

HIS 550 READINGS IN COMPARATIVE HISTORY (3)
Description: Specific topics in comparative historical methods, approached from a comparative perspective across cultures, regions, and time periods. Themes, such as comparative methodologies, colonization, modernization, gender systems, nationalism, ethogenesis among indigenous peoples, and identity and class formation. Co-convenes with HIS 650. Letter grade only. May be repeated for up to 6 units of credit.
Units: 3

*if there has been a previously approved UCC/UGC/ECCC change since the last catalog year, please copy the approved text from the proposal form into this field.

7. Justification for course change.
Course catalog description is being changed to better align with the recent changes to the History MA. Course content / topics remain unchanged.


Fall 2014

IN THE FOLLOWING SECTION, COMPLETE ONLY WHAT IS CHANGING

<table>
<thead>
<tr>
<th>CURRENT</th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current course subject and number:</td>
<td>Proposed course subject and number:</td>
</tr>
<tr>
<td>Current number of units:</td>
<td>Proposed number of units:</td>
</tr>
<tr>
<td>Current short course title:</td>
<td>Proposed short course title (max 30 characters):</td>
</tr>
<tr>
<td>Current long course title:</td>
<td>Proposed long course title (max 100 characters):</td>
</tr>
<tr>
<td>Current grading option: letter grade □ pass/fail □ or both □</td>
<td>Proposed grading option: letter grade □ pass/fail □ or both □</td>
</tr>
<tr>
<td>Current repeat for additional units:</td>
<td>Proposed repeat for additional units:</td>
</tr>
<tr>
<td>Current max number of units:</td>
<td>Proposed max number of units:</td>
</tr>
<tr>
<td>Current prerequisite:</td>
<td>Proposed prerequisite (include rationale in the justification):</td>
</tr>
<tr>
<td>Current co-requisite:</td>
<td>Proposed co-requisite (include rationale in the justification):</td>
</tr>
</tbody>
</table>

Effective Fall 2013
Current co-convene with: HIS 650

Proposed co-convene with: NONE

Current cross list with: Proposed cross list with:

9. Is this course in any plan (major, minor, or certificate) or sub plan (emphasis)? Yes ☒ No ☐
   If yes, describe the impact. If applicable, include evidence of notification to and/or response from each impacted academic unit.

History MA (elective), Women’s and Gender Studies GCRT (elective)

10. Is there a related plan or sub plan change proposal being submitted? Yes ☐ No ☒
    If no, explain.

   This course description change will not require a related plan change proposal.

11. Does this course include combined lecture and lab components? Yes ☐ No ☒
    If yes, include the units specific to each component in the course description above.

Answer 12-15 for UCC/ECCC only:

12. Is this course an approved Liberal Studies or Diversity course? Yes ☐ No ☒
    If yes, select all that apply. Liberal Studies ☒ Diversity ☐ Both ☐

13. Do you want to remove the Liberal Studies or Diversity designation? Yes ☐ No ☒
    If yes, select all that apply. Liberal Studies ☐ Diversity ☒ Both ☐

14. Is this course listed in the Course Equivalency Guide? Yes ☐ No ☒

15. Is this course a Shared Unique Numbering (SUN) course? Yes ☐ No ☒

FLAGSTAFF MOUNTAIN CAMPUS

Scott Galland 2/03/2014
Reviewed by Curriculum Process Associate Date

Approvals:

Department Chair/Unit Head (if appropriate) Date

Chair of college curriculum committee Date

Dean of college Date

Effective Fall 2013
## EXTENDED CAMPUSES

<table>
<thead>
<tr>
<th>Approval Category</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewed by Curriculum Process Associate</td>
<td></td>
</tr>
<tr>
<td><strong>Approvals:</strong></td>
<td></td>
</tr>
<tr>
<td>Academic Unit Head</td>
<td>Date</td>
</tr>
<tr>
<td>Division Curriculum Committee (Yuma, Yavapai, or Personalized Learning)</td>
<td>Date</td>
</tr>
<tr>
<td>Division Administrator in Extended Campuses (Yuma, Yavapai, or Personalized Learning)</td>
<td>Date</td>
</tr>
<tr>
<td>Faculty Chair of Extended Campuses Curriculum Committee (Yuma, Yavapai, or Personalized Learning)</td>
<td>Date</td>
</tr>
<tr>
<td>Chief Academic Officer; Extended Campuses (or Designee)</td>
<td>Date</td>
</tr>
</tbody>
</table>

Approved as submitted: Yes ☐ No ☐

Approved as modified: Yes ☐ No ☐

Effective Fall 2013
Proposal for **Course Deletion**

**FAST TRACK** *(Select if this will be a fast track item. Refer to Fast Track Policy for eligibility)*

1. Course subject and number: **HIS 605, HIS 610, HIS 640, HIS 650, HIS 664, HIS 665, HIS 667, HIS 668, HIS 680, HIS 690, HIS 692**
2. Units: **3**

3. College: **Arts and Letters**
4. Academic Unit: **History**

5. Justification for course deletion.
   The content of these courses is being consolidated and will be offered as individual topics of the new HIS 602 (Graduate Research Topics) course.

6. Is this course in any plan (major, minor or certificate) or sub plan (emphasis or concentration)?
   - Yes ☐
   - No ☒

   If yes, include a plan change proposal and evidence of notification to each impacted academic unit.

7. Effective at the **END** of what term and year? **Summer 2014**
   See effective dates calendar.

8. Current catalog title: **HIS 692 RESEARCH IN AMERICAN WEST, SOUTHWEST AND BORDERLANDS**

**Effective Fall 2013**
9. Is this course currently cross listed?  
   (For example: ES 450 and DIS 450)
   If yes, list course: ________________________
   Was the impacted department notified?  
   Yes ☐  No ☑

10. Is this course currently co-convened?  
    (For example: ESE 450 and ESE 550)
    If yes, list course:  HIS 505, HIS 510, HIS 540, HIS 550, HIS 564, HIS 565, HIS 567, HIS 568, HIS 580, HIS 590, HIS 592
    Was the impacted department notified?  
    Yes ☑  No ☐

Answer 11-13 for UCC/ECCC only:

11. Is this course an approved Liberal Studies or Diversity course?  
    If yes, select all that apply.  Liberal Studies ☐  Diversity ☐  Both ☐

12. Is this course listed in the Course Equivalency Guide?
   Yes ☐  No ☑

13. Is this course a Shared Unique Numbering (SUN) course?
   Yes ☐  No ☑

FLAGSTAFF MOUNTAIN CAMPUS

Scott Galland 01/31/2014
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

Effective Fall 2013
### EXTENDED CAMPUSES

<table>
<thead>
<tr>
<th>Approval Category</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewed by Curriculum Process Associate</td>
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<tr>
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<td></td>
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<tr>
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</tr>
<tr>
<td>Chief Academic Officer; Extended Campuses (or Designee)</td>
<td></td>
</tr>
</tbody>
</table>

Approved as submitted: Yes ☐ No ☐
Approved as modified: Yes ☐ No ☐

Effective Fall 2013
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.

1. College: CEFNS
2. Academic Unit: SESES

3. Academic Plan Name: Ph.D. (ESENSUSPHD)
4. Emphasis: Climate and Landscape Change (CLLSCM)

5. Plan proposal:
   - [ ] Plan Change
   - [ ] Emphasis Change
   - [ ] Plan Deletion
   - [ ] Emphasis Deletion

6. Current student learning outcomes of the plan. If structured as plan/emphasis, include for both core and emphasis.

   From the Core class, ENV 555: Environmental Science/Policy Interface:
   - analyze and assess best practices in adaptive management and governance theory
   - critique case studies at the science – environmental policy interface
   - assess and discuss scientific and engineering

   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).

   UNCHANGED

Effective Fall 2013
- ethics
- discuss and critique the scientific method in environmental sciences
- demonstrate success in professional writing and public speaking

*From the student's individual classes and research:*

1. Demonstrate skills in generating original ideas,
2. Demonstrate a wide range of knowledge across their specific emphasis area;
3. Analyze literature and data to comprehend, evaluate, and critique other data and interpretations;
4. Demonstrate skill in designing, analyzing, and interpreting research;
5. Use new hypotheses and original data and interpretations to solve problems;
6. Demonstrate effective oral and written communication of the results of the original research through scholarly meetings and publication of research results in high-quality refereed journals as well as interpretation and presentations of results to interested parties from the public.
Earth Sciences and Environmental Sustainability; Ph.D.

In addition to University Requirements:

<table>
<thead>
<tr>
<th>Minimum Units for Completion</th>
<th>60</th>
</tr>
</thead>
<tbody>
<tr>
<td>Additional Admission Requirements</td>
<td>Required</td>
</tr>
<tr>
<td>Emphasis, Minor, Certificate</td>
<td>Required</td>
</tr>
<tr>
<td>Dissertation</td>
<td>Dissertation is required.</td>
</tr>
<tr>
<td>Comprehensive Exam</td>
<td>Comprehensive Exam is required.</td>
</tr>
<tr>
<td>Oral Defense</td>
<td>Oral Defense is required.</td>
</tr>
<tr>
<td>Research</td>
<td>Individualized research is required.</td>
</tr>
<tr>
<td>Program of Study</td>
<td>View Program of Study</td>
</tr>
</tbody>
</table>

Additional Admission Requirements
Admission requirements over and above admission to NAU are required.
- NAU Graduate Online application required (www.nau.edu/graduateapply) for all programs. Details on admission requirements are included in the online application.
- Undergraduate degree from a regionally accredited institution
- Grade Point Average (GPA) of 3.00 (scale is 4.00 = "A"), or the equivalent.
- Admission to many graduate programs is on a competitive basis, and programs may have higher standards than those established by the Graduate College.
- Transcripts
- For details on graduate admission policies, please visit http://nau.edu/GradCol/Admissions/Graduate-Admissions-Policy/.
- International applicants have additional admission requirements: http://nau.edu/GradCol/Admissions/International/.

Individual program admission requirements include:
- GRE® revised General Test

Effective Fall 2013

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.

Earth Sciences and Environmental Sustainability; Ph.D.

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<tr>
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- International applicants have additional admission requirements: http://nau.edu/GradCol/Admissions/International/.

Individual program admission requirements include:
- GRE® revised General Test
<table>
<thead>
<tr>
<th>Doctoral Requirements</th>
<th>Doctoral Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td>Take the following 60 units, with a minimum GPA of 3.0:</td>
<td>Take the following 60 units, with a minimum GPA of 3.0:</td>
</tr>
<tr>
<td>- ENV 555 (3 units)</td>
<td>- ENV 555 (3 units)</td>
</tr>
<tr>
<td>- EES 605, EES 606 (2 units)</td>
<td>- EES 605, EES 606 (2 units)</td>
</tr>
<tr>
<td>- Coursework selected by student and committee from Environmental Law and Policy, Modern Languages (at the upper division level), Public Outreach and communications, Management and Business, Education, or Engineering (examples include ENV 698 Environmental Leadership, EGR 501, ETC 655) (6 units)</td>
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</tr>
</tbody>
</table>

Select courses specific to student’s area of emphasis and dissertation topic, with at least 6 units in your area of emphasis chosen from the following (30 units):

**Climate and landscape change**
- ENV 595, ENV 540, ENV 544, ENV 550, ENV 580, ENV 591
- ENV 596 or GLG 596
- GLG 537, GLG 670
- BIO 426C, BIO 479
- FOR 500, STA 570, STA 571

**Earth and planetary systems**
- GLG 516, GLG 520, GLG 542, GLG 560, GLG 561, GLG 565, GLG 570, GLG 575, GLG 612, GLG 615, GLG 617, GLG 625, GLG 627, GLG 629
- PHY 590
- STA 570, STA 571

**Engineering sustainable solutions**
- CENE 502, CENE 540, CENE 543, CENE 550, CENE 551, CENE 560, CENE 562
- ME 510, ME 520, ME 525, ME 530, ME 535, ME 540, ME 555, ME 560, ME 570, ME 575, ME 580, ME 698
- EGR 501, EGR 502
- GLG 670

Effective Fall 2013
• STA 570, STA 571

You may have no more than 6 units of 400-level courses. These 400-level courses cannot have been used to satisfy the requirements for any previous degree program(s). You must get your dissertation committee's approval for any courses taken outside of NAU.

Be aware that some courses may have prerequisites that you must also take. For prerequisite information click on the course or see your advisor.

In addition:
• 698 (seminar) courses selected by student and committee (4 units)
• EES 799, for the research, writing, and oral defense of an approved dissertation. You can only count 15 units of dissertation credit toward your degree; however, you may end up taking additional units because you must enroll for it each term while you're working on your dissertation. (15 units)

In choosing courses, please be aware that:
• At least 39 units must be 500- and 600-level courses.
• Your dissertation committee must approve all of your courses.

RESEARCH REQUIREMENTS
In addition to completing 45 units of coursework, you must demonstrate your independence, research skill, and experience in a discipline within earth sciences and environmental sustainability by choosing a problem and research area in consultation with your dissertation committee and then satisfactorily completing a dissertation.

Your dissertation research meets our standards when it is soundly based in the theoretical context of the subject, proceeds with a sound design that gives due attention to statistical adequacy, and concludes with findings and inferences set forth within an appropriate theoretical context. Your dissertation must
demonstrate that you have mastered your field of specialization, carried out independent scholarly work, and contributed significant new knowledge. You must pass an oral defense of your dissertation.

COMPREHENSIVE EXAM
We also require that you demonstrate written and oral communication skills in English at a level that will allow you to effectively communicate your ideas and knowledge to a wide range of audiences. Part of this demonstration involves comprehensive oral exams by the end of your 4th semester designed to establish your competence in a breadth and depth of subjects within your emphasis area and the larger field of earth sciences and environmental sustainability.

RESEARCH COMPETENCY REQUIREMENT
NAU policy for PhD programs includes a research competency requirement that must be satisfied before a student can be admitted to candidacy. This interdisciplinary doctoral program recognizes ENV 555, EES 605, and EES 606, plus one graduate level course with significant content in statistics and/or science/engineering research methods, as meeting this requirement.

8. Justification for proposal:
Changing the word "Landscape" to "Environmental" in the emphasis name more clearly communicates the broad focus of this emphasis area, and the research of the faculty in SESES, other departments, and our USGS partners in the PhD program. The new title will attract more students and faculty into the program because it will not be assumed that the area of interest is limited to a landscape scale.

9. NCATE designation, if applicable:
   □ Initial Plan  □ Advanced Plan  □ Remove Designation

10. Effective beginning FALL: 2015
    See effective dates calendar.

11. Will this proposal impact other plans, sub plans, or course offerings, etc.?  Yes □  No □
    If yes, describe the impact. If applicable, include evidence of notification to and/or response from each impacted academic unit

Effective Fall 2013
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 ☐ 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.

FLAGSTAFF MOUNTAIN CAMPUS

Scott Galland 2/5/2014
Reviewed by Curriculum Process Associate Date

Approvals:

Paul Umhoefer 2/5/2014
Department Chair/Unit Head (if appropriate) Date

Chair of college curriculum committee Date

Dean of college Date

For Committee use only:

UCG/UGC Approval 3/12/14 Date

Approved as submitted: Yes ☐ No ☐

Approved as modified: Yes ☐ No ☐

EXTENDED CAMPUSES

Effective Fall 2013
<table>
<thead>
<tr>
<th>Role</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reviewed by Curriculum Process Associate</td>
<td></td>
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<tr>
<td>Approvals:</td>
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</tr>
<tr>
<td>Academic Unit Head</td>
<td>Date</td>
</tr>
<tr>
<td>Division Curriculum Committee (Yuma, Yavapai, or Personalized Learning)</td>
<td>Date</td>
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<tr>
<td>Division Administrator in Extended Campuses (Yuma, Yavapai, or Personalized Learning)</td>
<td>Date</td>
</tr>
<tr>
<td>Faculty Chair of Extended Campuses Curriculum Committee (Yuma, Yavapai, or Personalized Learning)</td>
<td>Date</td>
</tr>
<tr>
<td>Chief Academic Officer; Extended Campuses (or Designee)</td>
<td>Date</td>
</tr>
</tbody>
</table>

Approved as submitted:  
Yes □   No □

Approved as modified:  
Yes □   No □

Effective Fall 2013
Program of Study
PhD in Earth Sciences & Environmental Sustainability
Northern Arizona University

Student's name: ___________________________ Date: ___________________________

Emphasis Area: ____________________________

Graduate Record Exam: ____________________________ Date taken: ___________________________
Score: ____________________________ Percentile: ____________________________

Verbal: _____________________________________________
Quantitative: _____________________________________________
Analytical Writing: _____________________________________________
Advanced: (Optional) _____________________________________________ Date: ___________________________

Degree: ____________________________

Academic Background:
Undergraduate Colleges & Universities Attended
1. _____________________________________________
2. _____________________________________________
3. _____________________________________________

Undergraduate major(s): ____________________________
Undergraduate minor(s): ____________________________

Graduate Colleges & Universities Attended
1. _____________________________________________ Date: ___________________________
Degree: ____________________________
2. ____________________________
Graduate major(s): _____________________________________________
Graduate minor(s): _____________________________________________

Previous Courses Relevant to the PhD in EES
Undergraduate
Course (prefix, number and title) Credits Grade Course (prefix, number and title) Credits Grade
___________________________________________
___________________________________________
___________________________________________
___________________________________________

Graduate
Course (prefix, number and title) Credits Grade Course (prefix, number and title) Credits Grade
___________________________________________
___________________________________________
___________________________________________
___________________________________________

Number of transferred hours from above (maximum 24 units exclusive of thesis): ________
Required courses include:
- EES 698 (1 unit each taken in first two spring semesters)
- ENV 555 or EGR 501 (3 units)
- Professional experience (6 units)
- ...698 - seminars (4 units in addition to the 1+1 credit EES PhD seminar)
- EES 799 (15 units minimum)
- Additional courses (30 units, of which 24 may be transferred from another graduate degree. Unless explicitly approved by the Dissertation Committee and by the GPC, all 30 units must be graded rather than P/F)

<table>
<thead>
<tr>
<th>A1. Graduate Courses for PhD</th>
<th>Credits</th>
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<tr>
<td>EES 698 (first spring semester)</td>
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</tr>
<tr>
<td>EES 698 (second spring semester)</td>
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</table>

<table>
<thead>
<tr>
<th>Course (prefix, number and title)</th>
<th>Credits</th>
<th>Grade</th>
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</thead>
</table>

A2. Undergraduate Deficiencies to be Taken

<p>| |</p>
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</table>

B. Professional Experience Fulfilled by:

<p>| |</p>
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Approval of the Program

<table>
<thead>
<tr>
<th>Print name</th>
<th>Date:</th>
<th>Signature</th>
</tr>
</thead>
</table>

PhD Program Coordinator

Note: If the comprehensive exam is unlikely to be completed by the end of the fifth semester following admission to the program, then attach an additional sheet to explain the rationale for the longer timeline. Exemptions to the five-semester timeline that are requested following the first committee meeting will only be granted in extenuating circumstances.

Distribute copies of signed form to: Dean of Graduate College, Student, Original: SESES file
If the changes included in this proposal are significant, attach copies of original and proposed syllabi in approved university format.

1. Course subject and number: **CSD 602**
   See upper and lower division undergraduate course definitions.

2. Units: **3**

3. College: **Health and Human Services**

4. Academic Unit: **Communication Studies and Disorders**

5. Current Student Learning Outcomes of the course.

   Knowledge Outcomes
   Demonstrate knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. Demonstrate the ability to integrate information pertaining to normal and abnormal human development across the life span.

   Demonstrate knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following areas: articulation; fluency; voice and resonance, including respiration and phonation; receptive and expressive language (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication and paralinguistic communication) in speaking, listening, reading, writing; hearing, including the impact on speech and language; swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding, orofacial myology); cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning); social aspects of communication (including challenging behavior, ineffective social skills, and lack of

Show the proposed changes in this column (if applicable). Bold the proposed changes in this column to differentiate from what is not changing, and Bold with strikethrough what is being deleted. *(Resources & Examples for Developing Course Learning Outcomes)*

**UNCHANGED**

Effective Fall 2012
communication opportunities; augmentative and alternative communication modalities.

Demonstrate current knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates.

Demonstrate knowledge of standards of ethical conduct.

Demonstrate knowledge of processes used in research and of the integration of research principles into evidence-based clinical practice.

Demonstrate knowledge of contemporary professional issues.

Demonstrate knowledge of entry level and advanced certifications, licensure, and other relevant professional credentials, as well as local, state, and national regulations and policies relevant to professional practice.

Demonstrate skills in oral and written or other forms of communication sufficient for entry into professional practice.

Demonstrate experiences sufficient in breadth and depth to achieve the following skills outcomes:

1. Evaluation
   a. Conduct screening and prevention procedures (including prevention activities).
   b. Collect case history information and integrate information from clients/patients, family, caregivers, teachers, and relevant others, including other professionals.
   c. Select and administer appropriate evaluation procedures, such as behavioral observations, nonstandardized and standardized tests, and instrumental procedures.
   d. Adapt evaluation procedures to meet client/patient needs.
   e. Interpret, integrate, and synthesize all information to develop diagnoses and make appropriate recommendations for intervention.
   f. Complete administrative and reporting functions necessary to support evaluation.
   g. Refer clients/patients for appropriate services.

2. Intervention
   a. Develop setting-appropriate intervention plans

Effective Fall 2012
with measurable and achievable goals that meet clients/patients' needs. Collaborate with clients/patients and relevant others in the intervention process.
b. Implement intervention plans (involve clients/patients and relevant others in the intervention process).
c. Select or develop and use appropriate materials and instrumentation for prevention and intervention.
d. Measure and evaluate clients/patients’ performance and progress.
e. Modify intervention plans, strategies, materials, or instrumentation as appropriate to meet the needs of clients/patients.
f. Complete administrative and reporting functions necessary to support intervention.
g. Identify and refer clients/patients for services as appropriate.

3. Interaction and Personal Qualities
a. Communicate effectively, recognizing the needs, values, preferred mode of communication, and cultural/linguistic background of the client/patient, family, caregivers, and relevant others.
b. Collaborate with other professionals in case management.
c. Provide counseling regarding communication and swallowing disorders to clients/patients, family, caregivers, and relevant others.
d. Adhere to the ASHA Code of Ethics and behave professionally.

6. Current title, description and units. Cut and paste, in its entirety, from the current on-line academic catalog*
http://catalog.nau.edu/Catalog/

Show the proposed changes in this column
**Bold** the proposed changes in this column to differentiate from what is not changing, and
**Bold with strikethrough** what is being deleted.

CSD 602 CLINICAL PRACTICUM IN SPEECH-LANGUAGE PATHOLOGY (3)
Description: Application of theoretical concepts to assess, diagnose and manage individuals with speech-language disorders. Knowledge of professional issues. Students are assigned to Clinical Practicum site. Department consent required. Letter grade only. May be repeated for up to 9 units of credit. Course fee required. Prerequisites include successful completion of all CSD non-clinical coursework identified on the Program of Study, 25 documented observation

CSD 602 CLINICAL PRACTICUM IN SPEECH-LANGUAGE PATHOLOGY (1-3)
Description: Application of theoretical concepts to assess, diagnose and manage individuals with speech-language disorders. Knowledge of professional issues. Students are assigned to Clinical Practicum site. Department consent required. Letter grade only. May be repeated for up to 9 units of credit. Course fee required. Prerequisites include successful completion of all CSD non-clinical coursework identified on the Program of Study, 25 documented
7. Justification for course change.

In order to more effectively implement the Peer-Team Mentorship (PTM) program in which a graduate student in their 3rd practicum is paired with a new graduate student clinician, during the spring semester, variable credit for CSD 602 is needed. This will enable the new graduate student clinician to not only be mentored, as is currently the case, but also obtain credit hours for their participation. At the present time, all new graduate students have the option to participate in this mentoring program but do not receive university credit. Preparing incoming graduate clinicians for clinic during the 15-week spring semester, alongside a peer-mentor, has shown to be more effective and beneficial in preparing students for an 8-10 week summer clinical program where they are providing individual services to 6-7 clients as part of their CSD 602 (Practicum I). This variable credit will allow us to change this practicum from 8-10 weeks (in the first summer) to up to 25 weeks across spring and summer sessions. Finally, an embedded “zero” credit is included in 602 to allow students to take a concurrent lab associated with the Audiology clinical rotation component of our program.

8. Effective BEGINNING of what term and year?  **Fall 2014**

**See effective dates calendar.**

### IN THE FOLLOWING SECTION, COMPLETE ONLY WHAT IS CHANGING

<table>
<thead>
<tr>
<th>CURRENT</th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current course subject and number:</td>
<td>Proposed course subject and number:</td>
</tr>
<tr>
<td>Current number of units:</td>
<td>Proposed number of units:</td>
</tr>
<tr>
<td>3</td>
<td>1-3</td>
</tr>
<tr>
<td>Current short course title:</td>
<td>Proposed short course title (max 30 characters):</td>
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<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>Current long course title:</td>
<td>Proposed long course title (max 100 characters):</td>
</tr>
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<td></td>
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<tr>
<td>Current grading option: letter grade</td>
<td>Proposed grading option: letter grade</td>
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<tr>
<td>☐ pass/fail</td>
<td>☐ pass/fail</td>
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<tr>
<td>☐ or both</td>
<td>☐ or both</td>
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<tr>
<td>Current repeat for additional units:</td>
<td>Proposed repeat for additional units:</td>
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<td></td>
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<td>Current max number of units:</td>
<td>Proposed max number of units:</td>
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<td>Current prerequisite:</td>
<td>Proposed prerequisite (include rationale in the justification):</td>
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<tr>
<td>Current co-requisite:</td>
<td>Proposed co-requisite (include rationale in the justification):</td>
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<tr>
<td>Current co-convene with:</td>
<td>Proposed co-convene with:</td>
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<td></td>
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</tbody>
</table>
9. Is this course in any plan (major, minor, or certificate) or sub plan (emphasis)? Yes ☒ No ☐
   If yes, describe the impact. If applicable, include evidence of notification to and/or response from each impacted academic unit.

Clinical Speech-Language Pathology; M.S.

10. Is there a related plan or sub plan change proposal being submitted? Yes ☐ No ☒
    If no, explain.

This fixed to variable unit change will not require related plan changes.

11. Does this course include combined lecture and lab components? Yes ☐ No ☒
    If yes, include the units specific to each component in the course description above.

Answer 12-15 for UCC/ECCC only:

12. Is this course an approved Liberal Studies or Diversity course? Yes ☐ No ☒
    If yes, select all that apply. Liberal Studies ☐ Diversity ☐ Both ☐

13. Do you want to remove the Liberal Studies or Diversity designation? Yes ☐ No ☒
    If yes, select all that apply. Liberal Studies ☐ Diversity ☐ Both ☐

14. Is this course listed in the Course Equivalency Guide? Yes ☐ No ☒

15. Is this course a Shared Unique Numbering (SUN) course? Yes ☐ No ☒

FLAGSTAFF MOUNTAIN CAMPUS

Scott Galland 1/27/2014
Reviewed by Curriculum Process Associate Date

Approvals:

Elise Lindstedt 01/23/2014
Department Chair/Unit Head (if appropriate) Date

Chair of college curriculum committee

Leslie Schulz 01/23/2014
Dean of college Date

Effective Fall 2012
EXTENDED CAMPUSES

Reviewed by Curriculum Process Associate

Approvals:

<table>
<thead>
<tr>
<th>Role</th>
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</tr>
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<tbody>
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</tr>
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<td></td>
</tr>
<tr>
<td>Faculty Chair of Extended Campuses Curriculum Committee (Yuma, Yavapai, or Personalized Learning)</td>
<td></td>
</tr>
<tr>
<td>Chief Academic Officer; Extended Campuses (or Designee)</td>
<td></td>
</tr>
</tbody>
</table>

Approved as submitted: Yes [ ] No [ ]
Approved as modified: Yes [ ] No [ ]

CURRENT 3 UNIT SYLLABUS NAD PROPOSED 1 & 2 UNIT SYLLABI (SEE ATTACHED)

Effective Fall 2012
CSD 602 Clinical Practicum in Speech-Language Pathology

PROPOSED SYLLABUS

NAU dates: August 28, 2014 – December 11, 2014 (Revised: 8/15/2013)

GENERAL INFORMATION

Name of College: College of Health and Human Services
Name of Department: Communication Sciences & Disorders
Course: CSD 602 Clinical Practicum in Speech-Language Pathology
Semester/Year: Fall 2013
Credit hours: 1
Course level: Graduate
Instructor’s name: Kim Farinella, Ph.D.
Clinical Director/Clinical Associate Professor

NAU Faculty:

Kim Farinella, PhD, CCC-SLP
Kim.Farinella@nau.edu 928-523-4699
Cindy Farrell, MS, CCC-SLP
Cynthia.Farrell@nau.edu 928-523-1257
Mary Harmon, PhD, CCC-SLP
Mary.Harmon@nau.edu 928-523-2806
Emi Isaki, PhD, CCC-SLP
Emi.Isaki@nau.edu 928-523-7481
Judy King, PhD, CCC-SLP
Judith.King@nau.edu 928-523-7436
Elise Lindstedt, PhD, CCC-SLP
Elise.Lindstedt@nau.edu 928-523-9591
Michael Skelton, AuD, CCC-A
Michael.Skelton@nau.edu 928-523-0868
Anna Sosa, PhD, CCC-SLP
Anna.Sosa@nau.edu 928-523-3845

Office address: Communication Sciences & Disorders
208 E. Pine Knoll Drive
PO Box: 15045
Flagstaff, AZ 86011
NAU CONTACT PHONE NUMBERS

Kim Farinella, Ph.D., CCC-SLP
Kim.farinella@nau.edu
928-523-4699

Donna Summerfelt, MA (CSD office)
speech@nau.edu
928-523-2969
928-523-0034 fax

COURSE POLICIES

Students are responsible for following all policies and procedures associated with Northern Arizona University and the Department of Communication Sciences & Disorders. Policies and procedures may be changed at the discretion of Northern Arizona University and/or the Department of Communication Sciences & Disorders. CSD students are responsible to follow the most recent CSD Graduate Student Handbook. Students will be notified of any CSD changes. The CSD Graduate Student Handbook is a living document and is posted on the CSD website. Students are expected to follow:

- NAU Graduate College Policies: [http://nau.edu/GradCol/Student-Resources/Current-Students/Policies/](http://nau.edu/GradCol/Student-Resources/Current-Students/Policies/)
- CSD Graduate Student Handbook: [www.nau.edu/chhs/csd > CSD Graduate Student Handbook](http://www.nau.edu/chhs/csd)
- Overview of some NAU policy statements: [http://www4.nau.edu/avpsa/UCCPolicy/plcystmt.html](http://www4.nau.edu/avpsa/UCCPolicy/plcystmt.html)
- The course syllabus
- Blackboard Learn postings
- Emails sent by the instructor
- Expectations of individual supervisors
- The NAU Speech-Language-Hearing Clinic Manual (Full-time students only; if assigned to the clinic)

COURSE DUE DATES

Dates at a glance:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
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<tbody>
<tr>
<td>Instruction begins</td>
<td>August 26, 2014</td>
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<tr>
<td>Mid-session CCE due</td>
<td>October 14, 2014</td>
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<tr>
<td>Last day of instruction</td>
<td>December 11, 2014</td>
</tr>
<tr>
<td>End-of-session requirements due on or before</td>
<td>December 16, 2014</td>
</tr>
<tr>
<td>Grades submitted</td>
<td>December 20, 2014</td>
</tr>
<tr>
<td>Grades post on transcript</td>
<td>December 24, 2014</td>
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</table>
CSD 602 Clinical Practicum in Speech-Language Pathology

| All items! |
| All together! |
| All originals! |

Always use the most updated forms, which are located on the CSD website!

Return items to:
Northern Arizona University
Communication Sciences & Disorders
208 E. Pine Knoll Drive
PO Box: 15045
Flagstaff, AZ 86011

### Mid-session requirements:

<table>
<thead>
<tr>
<th># forms used in the course</th>
<th># forms student mails/drops off to the CSD office – originals only</th>
<th># forms CSD emails to the student at mid-session</th>
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<tbody>
<tr>
<td>1</td>
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<tr>
<td>Clinical Competency Evaluation (CCE)</td>
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### End of session requirements:

<table>
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<tr>
<th># forms used in course</th>
<th># forms student mails/drops off to the CSD office – originals only</th>
<th># forms NAU e mails to the student at end-of-session</th>
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</thead>
<tbody>
<tr>
<td>10</td>
<td>9 Bundle for CSD Office to review (5)</td>
<td>1 Supervisor/Course evaluation – extremely important for annual reports</td>
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<tr>
<td></td>
<td>Daily Log - including</td>
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<td>Summary form</td>
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<td>Current Clinical Rotation Hours Towards AZ Licensure</td>
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<td>Synopsis of AZ Licensure – all students</td>
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<td>Bundle for course instructor to review (4)</td>
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<td>Caseload Feedback</td>
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<td></td>
<td>Clinical Competency Evaluation (CCE)</td>
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<td>Reflective Review</td>
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</tr>
<tr>
<td></td>
<td>Self-evaluation</td>
<td></td>
</tr>
</tbody>
</table>
The end-of-session procedure:

- The CSD Office will check your paperwork. If complete, they will give the course instructor the paperwork.
- Your grade is assigned and you will be emailed by your instructor.
- Your grade is submitted to the Registrar. Check your transcript.
- It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student’s paperwork is not turned in on time, the student receives an “Incomplete” grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the form is sent to the Registrar and the new grade appears on the student’s transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. New clinical hours may not be logged until the grade appears on the transcript.

**COURSE PREREQUISITES**

- Read ASHA Code of Ethics
- Read Standards for the Certificate of Clinical Competence (ASHA)
- Completion of required graduate course work as indicated on your Program of Study
- Completion of CSD 510 with a grade of B or better
- Completion of the Practicum Information form – **new one each rotation!**
- Completion of the Registration Checklist – **new one each rotation!**

Northern Arizona University guarantees each site that the items on the Registration Checklist are current. A student is not to be present in the facility unless all items on the checklist are current. (Exception: Summers-Only students may be at their employment site but may not accrue hours.) It is the responsibility of the student to be aware of expiration dates and renew items in a timely manner.

The following procedure will be strictly enforced with regard to expiration dates:

- **1st**: If an item becomes expired, the supervisor at the site will be contacted and told that the student is not allowed to be present at the site.
- **2nd**: The student may become administratively dropped from the course.

**COURSE DESCRIPTION**

Students enrolled in CSD 602 will apply theoretical concepts to assess, diagnose, and manage individuals with speech, language, and hearing disorders. Students will further their clinical knowledge base necessary for
CSD 602 Clinical Practicum in Speech-Language Pathology

successful completion of the National Examination in Speech Pathology and Audiology (PRAXIS). Individual speech-language diagnostic and therapy sessions will be arranged by the ASHA certified supervisor and the practicum student. The Clinical Practicum will be completed in the sites identified to meet the requirements of competencies in child and adult hours.

FORMS/DOCUMENTS ASSOCIATED WITH THIS COURSE

Posted on Blackboard Learn
- Syllabus

Posted on the CSD website: http://www.nau.edu/CHHS/CSD/Student-Resources/Forms/
- ASHA Code of Ethics
- Caseload Feedback
- Clinical Competency Evaluation for Speech-Language Pathology
- Daily Log (including Total Minutes sheet, Summary form, Current Clinical Rotation Hours Towards AZ Licensure, and Synopsis of AZ Licensure)
- Reflective Review
- Self-evaluation
- Standards for the Certificate of Clinical Competence in Speech-Language Pathology (ASHA)

Forms associated with this course (emailled to the student by NAU at the end of your course)
- Supervisor Evaluation/Course Evaluation

ASSESSMENT OF STUDENT LEARNING OUTCOMES

The supervisor completes the following form which is submitted by the student:
- Clinical Competency Evaluation form: examines attainment of competencies required by the American Speech-Language-Hearing Association in the areas of assessment, intervention, and interaction/personal qualities. Supervisors will determine competency at mid-session and end-of-session using this form. This form is the only form that the supervisor needs to complete.

The student completes and submits the following forms:
- Caseload Feedback form: utilized to determine number of direct contact hours obtained at the site and supervisor information.
- Course evaluation/Supervisor evaluation: student evaluation of the course/supervisor (e mailed to student by CSD department)
CSD 602 Clinical Practicum in Speech-Language Pathology

- Daily Log (including Total Minutes, Summary form, Current Clinical Rotation Hours Towards AZ Licensure, and Synopsis of AZ Licensure): records direct contact hours obtained in nine content areas, child/adult treatment, and child/adult evaluation.
- Reflective Review: student reports how well NAU prepared them for the rotation and provides some general supervisor feedback.
- Self-Evaluation: student reports strengths and areas needing improvement.

STUDENT LEARNING EXPECTATIONS/OUTCOMES FOR THIS COURSE

Standard IV: Knowledge Outcomes
Demonstrate knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. Demonstrate the ability to integrate information pertaining to normal and abnormal human development across the life span.

Standard IV-C
Demonstrate knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following areas:

Articulation

Fluency

Voice and resonance, including respiration and phonation

Receptive and expressive language (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication and paralinguistic communication) in speaking, listening, reading, writing

Hearing, including the impact on speech and language

Swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding, orofacial myology)

Cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning)

Social aspects of communication (including challenging behavior, ineffective social skills, and lack of
communication opportunities

Augmentative and alternative communication modalities

Standard IV-D
Demonstrate current knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates.

Standard IV-E
Demonstrate knowledge of standards of ethical conduct.

Standard IV-F
Demonstrate knowledge of processes used in research and of the integration of research principles into evidence-based clinical practice.

Standard IV-G
Demonstrate knowledge of contemporary professional issues.

Standard IV-H
Demonstrate knowledge of entry level and advanced certifications, licensure, and other relevant professional credentials, as well as local, state, and national regulations and policies relevant to professional practice.

Standard V-A
Demonstrate skills in oral and written or other forms of communication sufficient for entry into professional practice.

Standard V-B
Demonstrate experiences sufficient in breadth and depth to achieve the following skills outcomes:

1. Evaluation
CSD 602 Clinical Practicum in Speech-Language Pathology

a. Conduct screening and prevention procedures (including prevention activities).
b. Collect case history information and integrate information from clients/patients, family, caregivers, teachers, and relevant others, including other professionals.
c. Select and administer appropriate evaluation procedures, such as behavioral observations, nonstandardized and standardized tests, and instrumental procedures.
d. Adapt evaluation procedures to meet client/patient needs.
e. Interpret, integrate, and synthesize all information to develop diagnoses and make appropriate recommendations for intervention.
f. Complete administrative and reporting functions necessary to support evaluation.
g. Refer clients/patients for appropriate services.

2. Intervention
   a. Develop setting-appropriate intervention plans with measurable and achievable goals that meet clients'/patients' needs. Collaborate with clients/patients and relevant others in the intervention process.
   b. Implement intervention plans (involve clients/patients and relevant others in the intervention process).
   c. Select or develop and use appropriate materials and instrumentation for prevention and intervention.
   d. Measure and evaluate clients'/patients' performance and progress.
   e. Modify intervention plans, strategies, materials, or instrumentation as appropriate to meet the needs of clients/patients.
   f. Complete administrative and reporting functions necessary to support intervention.
   g. Identify and refer clients/patients for services as appropriate.

3. Interaction and Personal Qualities
   a. Communicate effectively, recognizing the needs, values, preferred mode of communication, and cultural/linguistic background of the client/patient, family, caregivers, and relevant others.
   b. Collaborate with other professionals in case management.
   c. Provide counseling regarding communication and swallowing disorders to clients/patients, family, caregivers, and relevant others.
   d. Adhere to the ASHA Code of Ethics and behave professionally.

Standard V-C
Complete a minimum of 400 clock hours of supervised clinical experience in the practice of speech-language pathology. Twenty-five hours must be spent in clinical observation, and 375 hours must be spent in direct client/patient contact.

Standard V-E
CSD 602 Clinical Practicum in Speech-Language Pathology

Supervision must be provided by individuals who hold the Certificate of Clinical Competence in the appropriate profession. The amount of direct supervision must be commensurate with the student’s knowledge, skills, and experience, must not be less than 25% of the student’s total contact with each client/patient, and must take place periodically through the practicum. Supervision must be sufficient to ensure the welfare of the client/patient.

Standard V-F
Supervised practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities.

COURSE STRUCTURE/APPRAOCH

To obtain clinical competency, as determined by ASHA, a graduate student must complete a minimum of 400 clinical clock hours of supervised clinical experience in the practice of speech-language pathology. The student must obtain 375 clinical hours in direct client/patient contact and 25 hours in clinical observation. At least 325 of the 400 clock hours must be completed while the student is engaged in graduate study. Direct supervision must be in real time and must never be less than 25% of the student’s total contact with each client/patient and must take place periodically throughout the practicum. These are minimum requirements and should be adjusted upward if the student’s level of knowledge, experience, and competence warrants. Supervisors sign off for the 25% time observed and for other hours obtained at the site, although not necessarily observed. Supervision must be provided by an individual (or individuals) who hold a current Certificate of Clinical Competence in Speech-Language Pathology and/or Audiology.

Supervised Clinical Practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities. The student must complete a practicum that includes supervised clinical experiences sufficient in breadth and depth in evaluation, intervention, and interaction/personal qualities.

TEXTBOOK AND REQUIRED MATERIALS

- No textbook
- Readings required by your specific site
- ASHA website for complete information concerning the requirements of your particular state: http://www.asha.org/advocacy/state/
RECOMMENDED OPTIONAL MATERIALS/REFERENCES


    Also: The N-CEP Compendium of Clinical Practice Guidelines and Systematic Reviews http://www.asha.org/members/ebp/compendium/N-CEP-background.htm

COURSE COMPLETION

Students follow the NAU calendar with regard to start and end dates of the session. The student needs to be present for a minimum of 45 on-site hours at the site. On-site hours are not documented/logged. On-site hours are not the same as direct contact hours. Students need to document direct client/patient clinical experiences on their electronic logs, which are submitted to the CSD Office at the end of the session. Direct contact hours include evaluation, treatment, and feedback meetings.

The practicum is completed following the NAU calendar dates and not when the student has achieved a specific number of direct contact hours. There is not a required number of direct client/patient hours required in the course.

Hours required in specific disorders, child/adult, and evaluation/treatment are regulated by three bodies: CSD/ASHA, the state of Arizona licensure, and the student’s specific state. CSD/ASHA requirements are delineated in the 2014 ASHA Standards and specific requirements are delineated on the student’s Program of Study and Daily Log (including Total Minutes and Summary form). Arizona Licensure requirements are delineated on the Synopsis of Arizona Licensure form. All students must meet the requirements on the Synopsis of Arizona Licensure form. A student’s state requirements are found on the ASHA website, www.asha.org/advocacy/state/.

It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student’s paperwork is not turned in on time, the student receives an “Incomplete” grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the
CSD 602 Clinical Practicum in Speech-Language Pathology

form is sent to the Registrar and the new grade appears on the student’s transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. The student is not allowed to start the next clinical rotation or accrue hours until the student’s grade appears on the transcript.

See CSD Graduate Student Handbook for complete details.

GRADING AND CLINICAL PERFORMANCE PLANS

• The supervisor completes the Clinical Competency Evaluation at mid-session and end-of-session.
• If at mid-session the student receives a grade of “C” or below, a Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the supervisor.
• The course instructor assigns the final grade. This is based on the CCE submitted by the supervisor and CSD course expectations/requirements stated in the syllabus. The course instructor may not raise a suggested CCE grade from the site supervisor, however, if the course instructor deems that the student has not achieved expected competencies, the course instructor may submit a lower grade.
• A grade of C or lower for the final grade will result in a repetition of the rotation, however, hours are still accrued, unless the supervisor refuses to sign the hours. A Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the next supervisor.
• If the student has more than 6 units of graduate work with a grade of “C” or below, the student cannot continue in the master’s program, regardless of the grade point average.
• A student receiving a grade of “C” or below in a clinical rotation must repeat the course, unless this is the student’s third grade of “C” or below, at which time the graduate college policy of dismissal from the graduate program will be recommended to the Graduate College.
• A student receiving a grade of “C” or below in a clinical rotation will be placed on a Clinical Performance Plan, unless this is the student’s third grade of “C” or below, at which time the graduate college policy of dismissal from the graduate program will be recommended to the Graduate College. This Plan will be shared with the next supervisor.

See CSD Graduate Student Handbook > NAU Graduate College Policies > GPA Requirements and Course Repeat Policy for complete details.

See CSD Graduate Student Handbook > CSD Additional Information > Clinical Performance Plans for complete details pertaining to remediation.
CSD 602 Clinical Practicum in Speech-Language Pathology

DISMISSAL FROM A CLINICAL ROTATION
If the supervisor/course instructor deems that a student does not fulfill the “essential tasks of the job” and/or is not meeting the “standard of care” required to provide services, then the supervisor/course instructor may dismiss the student from the clinical rotation.

- It is recommended, but not required, that efforts are made to improve the student’s performance prior to the mid-session evaluation.
- Dismissal may take place at any time during the clinical rotation at the discretion of the supervisor.
- The earned grade at the time of dismissal will be submitted as the final grade.
- The student must comply with all other CSD policies, as designated in the CSD Graduate Student Handbook.

ABSENCES
If the student is unable to attend a session, the student is responsible for notifying the supervisor. The supervisor will determine the course of action. During times of highly contagious flu, the College of Health and Human Services encourages everyone not to expose others to flu-like symptoms. The supervisor will show consideration for absences taken due to flu.

DISABILITY RESOURCES
Services and accommodations are available at no cost to all NAU students. See their website for complete information: www.nau.edu/dr. For further details pertaining to eligibility, email DR@nau.edu, or call 928-523-8773. If eligibility is granted, the student will be provided with a letter that precisely states the terms of your accommodations. This letter is most effective when presented to the supervisor/instructor prior to the start of the course. If presented during the course, accommodations are provided only from the date following presentation of the letter. See CSD Graduate Student Handbook for details.

CALENDARS
- Registrar calendar: http://nau.edu/Registrar/Important-Dates/
- Graduate College calendar: http://nau.edu/GradCol/Deadlines/
- Extended Campus calendar: http://extended.nau.edu/Calendar.aspx

PROFESSIONALISM AND PROFESSIONAL LETTERS
- Professional interactions, with faculty, staff, student workers, peers, fellow students, clinical rotation site individuals, and third parties are required by the Communication Sciences and Disorders Department.
CSD 602 Clinical Practicum in Speech-Language Pathology

This includes communication that is face to face, by phone, emails, texts, letters, and other forms of communication.

- Clinical Competency Evaluation form: www.nau.edu/chhs/csd > Student Resources > forms > Clinical Competency Evaluation form.

If a student is not complying with professionalism, the advisor or course instructor may send the student a Professionalism Letter. The Professionalism Letter will copy this section from the CSD Graduate Student Handbook and will include a brief statement about the situation. The Professionalism Letter will be discussed at the next faculty meeting. Receiving a Professionalism Letter may impact your recommendation to an externship site and/or your recommendations to a future place of employment.

SYNOPSIS OF ARIZONA LICENSURE FORM

All students are required to complete this form. Even if you will not be practicing in Arizona, our department writes a letter to your state affirming that you have met our state requirements. This form provides the student with an excellent overview of the direct contact hours that they are accruing. Accrued hours are entered on this form after each session.

OFFICE OF ACADEMIC ASSESSMENT

All forms are analyzed by the department’s Office of Academic Assessment representative following the conclusion of the course. The CSD Department submits an annual report to the University’s Office of Assessment. The CSD’s Plan and Report may be viewed on-line at the Office of Assessment website, http://www4.nau.edu/assessment/. This report is annually emailed to all faculty, staff, and students.

CSD 602 GUIDELINES

Located on the CSD website: www.nau.edu/chhs/csd > Student Resources > forms > 602 & 608 forms > CSD 602 Guidelines

Supervision
Northern Arizona University requests that each supervisor assess a student’s performance by using our “Clinical Competency Evaluation” form at the mid-session and at the end-of-session. We do not make any other requests, as we believe that the site should choose the tasks that they expect of the student. Direct
supervision must be in real time and must never be less than 25% of the student’s total contact with each client/patient and must take place periodically throughout the practicum. These are minimum requirements and should be adjusted upward if the student’s level of knowledge, experience, and competence warrants (Standard V-E).

**On-site hours vs. Direct client/patient contact hours**
The CSD Department follows the Arizona Board of Regents Academic Contact Hour Policy (ABOR Handbook, 2-206, Academic Credit). We refer to the time physically present at the site as “on-site” hours. On-site hours include meetings/lunches, etc. On-site hours are not documented/logged. Therefore, with regard to NAU Practica, 1 unit of credit = a minimum of 45 on-site hours (per semester/session):

Some possibilities include:
- over 15 weeks = minimum of 3 on-site hours/week
- over 12 weeks = minimum of 3.75 on-site hours/week

On-site hours should not be confused with ASHA’s “direct client/patient contact” hours, which are documented/logged electronically by the student, and include evaluation, intervention, and feedback meetings. Report writing time is not included.

**Items emailed to the supervisor at the start of the clinical rotation**
- The course instructor emails the student: a Letter of Appreciation, the Syllabus, and the Clinical Competency Evaluation prior to the rotation. The student is to give these items to the supervisor prior to the start of the clinical rotation.
- The supervisor will receive, from the course instructor, after the session starts, the same Letter of Appreciation, the Syllabus, and the Clinical Competency Evaluation.

**Achieving needed hours**
- Students are not required to achieve a minimum number of hours, at a site, during any clinical rotation.
- Students do not need to acquire a certain number of “direct contact” hours before starting or completing a Clinical Practicum.
- Students need to advocate for themselves and make sure they are getting the hours that they need.
- Students need to have all of their hours by the conclusion of their Externship to meet the requirements of:
  - CSD/ASHA requirements as logged on the CSD Daily Logs form (some hours in each of the 9 major disorder areas of the Summary tab and a total of 400 hours, 25 which are observation)
  - Synopsis of AZ Licensure form (required by all students)
  - Any other specific requirements established by their particular state
- The student may only log hours during the NAU dates for the session listed on the first page of the syllabus.

**Starting the clinical rotation**
CSD 602 Clinical Practicum in Speech-Language Pathology

- The student must follow their Program of Study sequence with regard to completion of academic coursework prior to the clinical rotation.
- The student's previous clinical rotation must be completed, a grade given, and posted on the transcript to begin the next rotation.
- Clinical rotation dates are designated on the syllabus.
- The student must be registered for the course to be at the site.
- The student must be registered for the course to log direct contact hours.

Site expectations
- The student is to follow procedures as outlined by the supervisor. Site expectations differ.
- The student is not required to be at the site during NAU holidays, NAU cancelled school days, or when sick. The student still needs to meet the required number of physical on-site hours at the site, unless instructed differently by the supervisor. All schedule and time adjustments must be approved by the supervisor.

Grading
- The supervisor completes the Clinical Competency Evaluation at mid-session and end-of-session.
- If at mid-session the student receives a grade of "C" or below, a Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the supervisor.
- The course instructor assigns the final grade. This is based on the CCE submitted by the supervisor and CSD course expectations/requirements stated in the syllabus. The course instructor may not raise a suggested CCE grade from the site supervisor, however, if the course instructor deems that the student has not achieved expected competencies, the course instructor may submit a lower grade.
- A grade of C or lower for the final grade will result in a repetition of the rotation, however, hours are still accrued, unless the supervisor refuses to sign the hours. A Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the next supervisor.

Student submission of mid-session CCE
- The student is responsible for submitting the mid-session CCE to the CSD office.

Student submission of end-of-session required paperwork
- The student is responsible for submitting the end-of-session paperwork to the CSD office.
- Tracking may be used but is not necessary.

Ending the clinical rotation
- It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student's paperwork is not turned in on time, the student receives an "Incomplete" grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of
CSD 602 Clinical Practicum in Speech-Language Pathology

grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the form is sent to the Registrar and the new grade appears on the student’s transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. The student is not allowed to start the next clinical rotation or accrue hours until the student’s grade appears on the transcript.

Additional student information
- The syllabus will be on Blackboard Learn before the start of the session. It states all of the requirements for your course. Follow the dates!
- All required forms are on the CSD website. Do not use old forms, as they will be returned to you.
- Always refer to the most recent information given to you by NAU.
- The student may have more than one site during a clinical rotation.
- The student may have more than one supervisor.
- (Summers-Only students) The two Practica may be at the same site.
- See the CSD Graduate Student Handbook for details regarding withdrawing from a clinical rotation and/or requesting to switch sites.
- See the CSD Graduate Student Handbook for details regarding dismissal from a clinical rotation.
- See the CSD Graduate Student Handbook for details regarding GPA Requirements and Course Repeat Policy.
- See CSD Graduate Student Handbook for details regarding Clinical Performance Plans.

CSD 602 Guidelines revised: October 1, 2013
CSD 602 Clinical Practicum in Speech-Language Pathology

PROPOSED SYLLABUS

NAU dates: August 28, 2014 – December 11, 2014 (Revised: 8/15/2013)

GENERAL INFORMATION

Name of College: College of Health and Human Services
Name of Department: Communication Sciences & Disorders
Course: CSD 602 Clinical Practicum in Speech-Language Pathology
Semester/Year: Fall 2014
Credit hours: 2
Course level: Graduate
Instructor’s name: Kim Farinella, Ph.D.
Clinical Director/Clinical Associate Professor

NAU Faculty:

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Office address: Communication Sciences & Disorders
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PO Box: 15045
Flagstaff, AZ 86011
NAU CONTACT PHONE NUMBERS

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928-523-4699

Donna Summerfelt, MA (CSD office)
speech@nau.edu
928-523-2969
928-523-0034 fax

COURSE POLICIES

Students are responsible for following all policies and procedures associated with Northern Arizona University and the Department of Communication Sciences & Disorders. Policies and procedures may be changed at the discretion of Northern Arizona University and/or the Department of Communication Sciences & Disorders. CSD students are responsible to follow the most recent CSD Graduate Student Handbook. Students will be notified of any CSD changes. The CSD Graduate Student Handbook is a living document and is posted on the CSD website. Students are expected to follow:

- NAU Graduate College Policies: [http://nau.edu/GradCol/Student-Resources/Current-Students/Policies/](http://nau.edu/GradCol/Student-Resources/Current-Students/Policies/)
- CSD Graduate Student Handbook: [www.nau.edu/chhs/csd > CSD Graduate Student Handbook](http://www.nau.edu/chhs/csd)
- Overview of some NAU policy statements: [http://www4.nau.edu/avpaa/UCCPolicy/plcystmt.html](http://www4.nau.edu/avpaa/UCCPolicy/plcystmt.html)
- The course syllabus
- Blackboard Learn postings
- Emails sent by the instructor
- Expectations of individual supervisors
- The NAU Speech-Language-Hearing Clinic Manual (Full-time students only; if assigned to the clinic)

COURSE DUE DATES

Dates at a glance:

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Instruction begins</td>
<td>August 26, 2014</td>
</tr>
<tr>
<td>Mid-session CCE due</td>
<td>October 14, 2014</td>
</tr>
<tr>
<td>Last day of instruction</td>
<td>December 11, 2014</td>
</tr>
<tr>
<td>End-of-session requirements due on or before</td>
<td>December 16, 2014</td>
</tr>
<tr>
<td>Grades submitted</td>
<td>December 20, 2014</td>
</tr>
<tr>
<td>Grades post on transcript</td>
<td>December 24, 2014</td>
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</tbody>
</table>
CSD 602 Clinical Practicum in Speech-Language Pathology

Always use the most updated forms, which are located on the CSD website!

Return items to:
Northern Arizona University
Communication Sciences & Disorders
208 E. Pine Knoll Drive
PO Box: 15045
Flagstaff, AZ 86011

<table>
<thead>
<tr>
<th>Mid-session requirements:</th>
<th># forms used in the course</th>
<th># forms student mails/drops off to the CSD office – originals only</th>
<th># forms CSD emails to the student at mid-session</th>
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<tbody>
<tr>
<td></td>
<td>1</td>
<td>1 Clinical Competency Evaluation (CCE)</td>
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<tr>
<th>End of session requirements:</th>
<th># forms used in course</th>
<th># forms student mails/drops off to the CSD office – originals only</th>
<th># forms NAU e-mails to the student at end-of-session</th>
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<tr>
<td></td>
<td>10</td>
<td>9 Bundle for CSD Office to review (5)</td>
<td>1 Supervisor/Course evaluation – extremely important for annual reports</td>
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<td>Daily Log - including</td>
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<td>Total Minutes sheet</td>
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<td>Summary form</td>
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<td>Current Clinical Rotation Hours Towards AZ Licensure</td>
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<td>Synopsis of AZ Licensure – all students</td>
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<td>Bundle for course instructor to review (4)</td>
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<td>Caseload Feedback</td>
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<td>Clinical Competency Evaluation (CCE)</td>
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<td>Reflective Review</td>
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<td>Self-evaluation</td>
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</tbody>
</table>
CSD 602 Clinical Practicum in Speech-Language Pathology

The end-of-session procedure:

- The CSD Office will check your paperwork. If complete, they will give the course instructor the paperwork.
- Your grade is assigned and you will be emailed by your instructor.
- Your grade is submitted to the Registrar. Check your transcript.
- It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student’s paperwork is not turned in on time, the student receives an “Incomplete” grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the form is sent to the Registrar and the new grade appears on the student’s transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. New clinical hours may not be logged until the grade appears on the transcript.

COURSE PREREQUISITES

Read ASHA Code of Ethics
Read Standards for the Certificate of Clinical Competence (ASHA)
Completion of required graduate course work as indicated on your Program of Study
Completion of CSD 510 with a grade of B or better
Completion of the Practicum Information form – new one each rotation!
Completion of the Registration Checklist – new one each rotation!

Northern Arizona University guarantees each site that the items on the Registration Checklist are current. A student is not to be present in the facility unless all items on the checklist are current. (Exception: Summers-Only students may be at their employment site but may not accrue hours.) It is the responsibility of the student to be aware of expiration dates and renew items in a timely manner.

The following procedure will be strictly enforced with regard to expiration dates:
- 1st: If an item becomes expired, the supervisor at the site will be contacted and told that the student is not allowed to be present at the site.
- 2nd: The student may become administratively dropped from the course.

COURSE DESCRIPTION

Students enrolled in CSD 602 will apply theoretical concepts to assess, diagnose, and manage individuals with speech, language, and hearing disorders. Students will further their clinical knowledge base necessary for
CSD 602 Clinical Practicum in Speech-Language Pathology

successful completion of the National Examination in Speech Pathology and Audiology (PRAXIS). Individual speech-language diagnostic and therapy sessions will be arranged by the ASHA certified supervisor and the practicum student. The Clinical Practicum will be completed in the sites identified to meet the requirements of competencies in child and adult hours.

FORMS/DOCUMENTS ASSOCIATED WITH THIS COURSE

Posted on Blackboard Learn
- Syllabus

Posted on the CSD website:  http://www.nau.edu/CHHS/CSD/Student-Resources/Forms/.
- ASHA Code of Ethics
- Caseload Feedback
- Clinical Competency Evaluation for Speech-Language Pathology
- Daily Log (including Total Minutes sheet, Summary form, Current Clinical Rotation Hours Towards AZ Licensure, and Synopsis of AZ Licensure)
- Reflective Review
- Self-evaluation
- Standards for the Certificate of Clinical Competence in Speech-Language Pathology (ASHA)

Forms associated with this course (emailed to the student by NAU at the end of your course)
- Supervisor Evaluation/Course Evaluation

ASSESSMENT OF STUDENT LEARNING OUTCOMES

The supervisor completes the following form which is submitted by the student:
- Clinical Competency Evaluation form: examines attainment of competencies required by the American Speech-Language-Hearing Association in the areas of assessment, intervention, and interaction/personal qualities. Supervisors will determine competency at mid-session and end-of-session using this form. This form is the only form that the supervisor needs to complete.

The student completes and submits the following forms:
- Caseload Feedback form: utilized to determine number of direct contact hours obtained at the site and supervisor information.
- Course evaluation/Supervisor evaluation: student evaluation of the course/supervisor (e mailed to student by CSD department)
CSD 602 Clinical Practicum in Speech-Language Pathology

- Daily Log (including Total Minutes, Summary form, Current Clinical Rotation Hours Towards AZ Licensure, and Synopsis of AZ Licensure): records direct contact hours obtained in nine content areas, child/adult treatment, and child/adult evaluation.
- Reflective Review: student reports how well NAU prepared them for the rotation and provides some general supervisor feedback.
- Self-Evaluation: student reports strengths and areas needing improvement.

STUDENT LEARNING EXPECTATIONS/OUTCOMES FOR THIS COURSE

<table>
<thead>
<tr>
<th>Standard IV: Knowledge Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. Demonstrate the ability to integrate information pertaining to normal and abnormal human development across the life span.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Standard IV-C</th>
</tr>
</thead>
<tbody>
<tr>
<td>Demonstrate knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following areas:</td>
</tr>
<tr>
<td>Articulation</td>
</tr>
<tr>
<td>Fluency</td>
</tr>
<tr>
<td>Voice and resonance, including respiration and phonation</td>
</tr>
<tr>
<td>Receptive and expressive language (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication and paralinguistic communication) in speaking, listening, reading, writing</td>
</tr>
<tr>
<td>Hearing, including the impact on speech and language</td>
</tr>
<tr>
<td>Swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding, orofacial myology)</td>
</tr>
<tr>
<td>Cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning)</td>
</tr>
<tr>
<td>Social aspects of communication (including challenging behavior, ineffective social skills, and lack of</td>
</tr>
</tbody>
</table>
communication opportunities

Augmentative and alternative communication modalities

Standard IV-D
Demonstrate current knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates.

Standard IV-E
Demonstrate knowledge of standards of ethical conduct.

Standard IV-F
Demonstrate knowledge of processes used in research and of the integration of research principles into evidence-based clinical practice.

Standard IV-G
Demonstrate knowledge of contemporary professional issues.

Standard IV-H
Demonstrate knowledge of entry level and advanced certifications, licensure, and other relevant professional credentials, as well as local, state, and national regulations and policies relevant to professional practice.

Standard V-A
Demonstrate skills in oral and written or other forms of communication sufficient for entry into professional practice.

Standard V-B
Demonstrate experiences sufficient in breadth and depth to achieve the following skills outcomes:

1. Evaluation
CSD 602 Clinical Practicum in Speech-Language Pathology

a. Conduct screening and prevention procedures (including prevention activities).
b. Collect case history information and integrate information from clients/patients, family, caregivers, teachers, and relevant others, including other professionals.
c. Select and administer appropriate evaluation procedures, such as behavioral observations, nonstandardized and standardized tests, and instrumental procedures.
d. Adapt evaluation procedures to meet client/patient needs.
e. Interpret, integrate, and synthesize all information to develop diagnoses and make appropriate recommendations for intervention.
f. Complete administrative and reporting functions necessary to support evaluation.
g. Refer clients/patients for appropriate services.

2. Intervention
a. Develop setting-appropriate intervention plans with measurable and achievable goals that meet clients'/patients' needs. Collaborate with clients/patients and relevant others in the intervention process.
b. Implement intervention plans (involve clients/patients and relevant others in the intervention process).
c. Select or develop and use appropriate materials and instrumentation for prevention and intervention.
d. Measure and evaluate clients'/patients' performance and progress.
e. Modify intervention plans, strategies, materials, or instrumentation as appropriate to meet the needs of clients/patients.
f. Complete administrative and reporting functions necessary to support intervention.
g. Identify and refer clients/patients for services as appropriate.

3. Interaction and Personal Qualities
a. Communicate effectively, recognizing the needs, values, preferred mode of communication, and cultural/linguistic background of the client/patient, family, caregivers, and relevant others.
b. Collaborate with other professionals in case management.
c. Provide counseling regarding communication and swallowing disorders to clients/patients, family, caregivers, and relevant others.
d. Adhere to the ASHA Code of Ethics and behave professionally.

Standard V-C
Complete a minimum of 400 clock hours of supervised clinical experience in the practice of speech-language pathology. Twenty-five hours must be spent in clinical observation, and 375 hours must be spent in direct client/patient contact.

Standard V-E
CSD 602 Clinical Practicum in Speech-Language Pathology

Supervision must be provided by individuals who hold the Certificate of Clinical Competence in the appropriate profession. The amount of direct supervision must be commensurate with the student’s knowledge, skills, and experience, must not be less than 25% of the student’s total contact with each client/patient, and must take place periodically through the practicum. Supervision must be sufficient to ensure the welfare of the client/patient.

Standard V-F
Supervised practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities.

COURSE STRUCTURE/APPROACH

To obtain clinical competency, as determined by ASHA, a graduate student must complete a minimum of 400 clinical clock hours of supervised clinical experience in the practice of speech-language pathology. The student must obtain 375 clinical hours in direct client/patient contact and 25 hours in clinical observation. At least 325 of the 400 clock hours must be completed while the student is engaged in graduate study. Direct supervision must be in real time and must never be less than 25% of the student’s total contact with each client/patient and must take place periodically throughout the practicum. These are minimum requirements and should be adjusted upward if the student’s level of knowledge, experience, and competence warrants. Supervisors sign off for the 25% time observed and for other hours obtained at the site, although not necessarily observed. Supervision must be provided by an individual (or individuals) who hold a current Certificate of Clinical Competence in Speech-Language Pathology and/or Audiology.

Supervised Clinical Practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities. The student must complete a practicum that includes supervised clinical experiences sufficient in breadth and depth in evaluation, intervention, and interaction/personal qualities.

TEXTBOOK AND REQUIRED MATERIALS

- No textbook
- Readings required by your specific site
- ASHA website for complete information concerning the requirements of your particular state:
  http://www.asha.org/advocacy/state/
RECOMMENDED OPTIONAL MATERIALS/REFERENCES


Also: The C-CEP Compendium of Clinical Practice Guidelines and Systematic Reviews http://www.asha.org/members/ebp/compendium/N-CEP-background.htm

COURSE COMPLETION

Students follow the NAU calendar with regard to start and end dates of the session. The student needs to be present for a minimum of 90 on-site hours at the site. On-site hours are not documented/logged. On-site hours are not the same as direct contact hours. Students need to document direct client/patient clinical experiences on their electronic logs, which are submitted to the CSD Office at the end of the session. Direct contact hours include evaluation, treatment, and feedback meetings.

The practicum is completed following the NAU calendar dates and not when the student has achieved a specific number of direct contact hours. There is not a required number of direct client/patient hours required in the course.

Hours required in specific disorders, child/adult, and evaluation/treatment are regulated by three bodies: CSD/ASHA, the state of Arizona licensure, and the student’s specific state. CSD/ASHA requirements are delineated in the 2014 ASHA Standards and specific requirements are delineated on the student’s Program of Study and Daily Log (including Total Minutes and Summary form). Arizona Licensure requirements are delineated on the Synopsis of Arizona Licensure form. All students must meet the requirements on the Synopsis of Arizona Licensure form. A student’s state requirements are found on the ASHA website, www.asha.org/advocacy/state/.

It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student’s paperwork is not turned in on time, the student receives an "Incomplete" grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the
CSD 602 Clinical Practicum in Speech-Language Pathology

form is sent to the Registrar and the new grade appears on the student’s transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. The student is not allowed to start the next clinical rotation or accrue hours until the student’s grade appears on the transcript.

See CSD Graduate Student Handbook for complete details.

GRADING AND CLINICAL PERFORMANCE PLANS

• The supervisor completes the Clinical Competency Evaluation at mid-session and end-of-session.

• If at mid-session the student receives a grade of “C” or below, a Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the supervisor.

• The course instructor assigns the final grade. This is based on the CCE submitted by the supervisor and CSD course expectations/requirements stated in the syllabus. The course instructor may not raise a suggested CCE grade from the site supervisor, however, if the course instructor deems that the student has not achieved expected competencies, the course instructor may submit a lower grade.

• A grade of C or lower for the final grade will result in a repetition of the rotation, however, hours are still accrued, unless the supervisor refuses to sign the hours. A Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the next supervisor.

• If the student has more than 6 units of graduate work with a grade of “C” or below, the student cannot continue in the master’s program, regardless of the grade point average.

• A student receiving a grade of “C” or below in a clinical rotation must repeat the course, unless this is the student’s third grade of “C” or below, at which time the graduate college policy of dismissal from the graduate program will be recommended to the Graduate College.

• A student receiving a grade of “C” or below in a clinical rotation will be placed on a Clinical Performance Plan, unless this is the student’s third grade of “C” or below, at which time the graduate college policy of dismissal from the graduate program will be recommended to the Graduate College. This Plan will be shared with the next supervisor.

See CSD Graduate Student Handbook > NAU Graduate College Policies > GPA Requirements and Course Repeat Policy for complete details.

See CSD Graduate Student Handbook > CSD Additional Information > Clinical Performance Plans for complete details pertaining to remediation.
CSD 602 Clinical Practicum in Speech-Language Pathology

DISMISSAL FROM A CLINICAL ROTATION

If the supervisor/course instructor deems that a student does not fulfill the “essential tasks of the job” and/or is not meeting the “standard of care” required to provide services, then the supervisor/course instructor may dismiss the student from the clinical rotation.

- It is recommended, but not required, that efforts are made to improve the student’s performance prior to the mid-session evaluation.
- Dismissal may take place at any time during the clinical rotation at the discretion of the supervisor.
- The earned grade at the time of dismissal will be submitted as the final grade.
- The student must comply with all other CSD policies, as designated in the CSD Graduate Student Handbook.

ABSENCES

If the student is unable to attend a session, the student is responsible for notifying the supervisor. The supervisor will determine the course of action. During times of highly contagious flu, the College of Health and Human Services encourages everyone not to expose others to flu-like symptoms. The supervisor will show consideration for absences taken due to flu.

DISABILITY RESOURCES

Services and accommodations are available at no cost to all NAU students. See their website for complete information: www.nau.edu/dr. For further details pertaining to eligibility, email DR@nau.edu, or call 928-523-8773. If eligibility is granted, the student will be provided with a letter that precisely states the terms of your accommodations. This letter is most effective when presented to the supervisor/instructor prior to the start of the course. If presented during the course, accommodations are provided only from the date following presentation of the letter. See CSD Graduate Student Handbook for details.

CALENDARS

- Registrar calendar: http://nau.edu/Registrar/Important-Dates/
- Graduate College calendar: http://nau.edu/GradCol/Deadlines/
- Extended Campus calendar: http://extended.nau.edu/Calendar.aspx

PROFESSIONALISM AND PROFESSIONAL LETTERS

- Professional interactions, with faculty, staff, student workers, peers, fellow students, clinical rotation site individuals, and third parties are required by the Communication Sciences and Disorders Department.
CSD 602 Clinical Practicum in Speech-Language Pathology

This includes communication that is face to face, by phone, emails, texts, letters, and other forms of communication.

- Clinical Competency Evaluation form: www.nau.edu/chhs/csd > Student Resources > forms > Clinical Competency Evaluation form.

If a student is not complying with professionalism, the advisor or course instructor may send the student a Professionalism Letter. The Professionalism Letter will copy this section from the CSD Graduate Student Handbook and will include a brief statement about the situation. The Professionalism Letter will be discussed at the next faculty meeting. Receiving a Professionalism Letter may impact your recommendation to an externship site and/or your recommendations to a future place of employment.

SYNOPSIS OF ARIZONA LICENSURE FORM

All students are required to complete this form. Even if you will not be practicing in Arizona, our department writes a letter to your state affirming that you have met our state requirements. This form provides the student with an excellent overview of the direct contact hours that they are accruing. Accrued hours are entered on this form after each session.

OFFICE OF ACADEMIC ASSESSMENT

All forms are analyzed by the department’s Office of Academic Assessment representative following the conclusion of the course. The CSD Department submits an annual report to the University’s Office of Assessment. The CSD’s Plan and Report may be viewed on-line at the Office of Assessment website, http://www4.nau.edu/assessment/. This report is annually emailed to all faculty, staff, and students.

CSD 602 GUIDELINES

Located on the CSD website: www.nau.edu/chhs/csd > Student Resources > forms > 602 & 608 forms > CSD 602 Guidelines

Supervision
Northern Arizona University requests that each supervisor assess a student’s performance by using our “Clinical Competency Evaluation” form at the mid-session and at the end-of-session. We do not make any other requests, as we believe that the site should choose the tasks that they expect of the student. Direct
supervision must be in real time and must never be less than 25% of the student’s total contact with each client/patient and must take place periodically throughout the practicum. These are minimum requirements and should be adjusted upward if the student’s level of knowledge, experience, and competence warrants (Standard V-E).

**On-site hours vs. Direct client/patient contact hours**
The CSD Department follows the Arizona Board of Regents Academic Contact Hour Policy (ABOR Handbook, 2-206, Academic Credit). We refer to the time physically present at the site as “on-site” hours. On-site hours include meetings/lunches, etc. On-site hours are not documented/logged. Therefore, with regard to NAU Practica, since 1 unit of credit = a minimum of 45 on-site hours (per semester/session):

- Clinical Practicum (2 units of credit) = minimum of 90 on-site hours
- Some possibilities include:
  - over 15 weeks = minimum of 6 on-site hours/week
  - over 12 weeks = minimum of 7.5 on-site hours/week

On-site hours should not be confused with ASHA’s “direct client/patient contact” hours, which are documented/logged electronically by the student, and include evaluation, intervention, and feedback meetings. Report writing time is not included.

**Items emailed to the supervisor at the start of the clinical rotation**
- The course instructor emails the student: a Letter of Appreciation, the Syllabus, and the Clinical Competency Evaluation prior to the rotation. The student is to give these items to the supervisor prior to the start of the clinical rotation.
- The supervisor will receive, from the course instructor, after the session starts, the same Letter of Appreciation, the Syllabus, and the Clinical Competency Evaluation.

**Achieving needed hours**
- Students are not required to achieve a minimum number of hours, at a site, during any clinical rotation.
- Students do not need to acquire a certain number of “direct contact” hours before starting or completing a Clinical Practicum.
- Students need to advocate for themselves and make sure they are getting the hours that they need.
- Students need to have all of their hours by the conclusion of their Externship to meet the requirements of:
  - CSD/ASHA requirements as logged on the CSD Daily Logs form (some hours in each of the 9 major disorder areas of the Summary tab and a total of 400 hours, 25 which are observation)
  - Synopsis of AZ Licensure form (required by all students)
  - Any other specific requirements established by their particular state
- The student may only log hours during the NAU dates for the session listed on the first page of the syllabus.

**Starting the clinical rotation**
CSD 602 Clinical Practicum in Speech-Language Pathology

- The student must follow their Program of Study sequence with regard to completion of academic coursework prior to the clinical rotation.
- The student’s previous clinical rotation must be completed, a grade given, and posted on the transcript to begin the next rotation.
- Clinical rotation dates are designated on the syllabus.
- The student must be registered for the course to be at the site.
- The student must be registered for the course to log direct contact hours.

Site expectations
- The student is to follow procedures as outlined by the supervisor. Site expectations differ.
- The student is not required to be at the site during NAU holidays, NAU cancelled school days, or when sick. The student still needs to meet the required number of physical on-site hours at the site, unless instructed differently by the supervisor. All schedule and time adjustments must be approved by the supervisor.

Grading
- The supervisor completes the Clinical Competency Evaluation at mid-session and end-of-session.
- If at mid-session the student receives a grade of “C” or below, a Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the supervisor.
- The course instructor assigns the final grade. This is based on the CCE submitted by the supervisor and CSD course expectations/requirements stated in the syllabus. The course instructor may not raise a suggested CCE grade from the site supervisor, however, if the course instructor deems that the student has not achieved expected competencies, the course instructor may submit a lower grade.
- A grade of C or lower for the final grade will result in a repetition of the rotation, however, hours are still accrued, unless the supervisor refuses to sign the hours. A Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the next supervisor.

Student submission of mid-session CCE
- The student is responsible for submitting the mid-session CCE to the CSD office.

Student submission of end-of-session required paperwork
- The student is responsible for submitting the end-of-session paperwork to the CSD office.
- Tracking may be used but is not necessary.

Ending the clinical rotation
- It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student’s paperwork is not turned in on time, the student receives an “Incomplete” grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of
CSD 602 Clinical Practicum in Speech-Language Pathology

grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the form is sent to the Registrar and the new grade appears on the student’s transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. The student is not allowed to start the next clinical rotation or accrue hours until the student’s grade appears on the transcript.

Additional student information
- The syllabus will be on Blackboard Learn before the start of the session. It states all of the requirements for your course. Follow the dates!
- All required forms are on the CSD website. Do not use old forms, as they will be returned to you.
- Always refer to the most recent information given to you by NAU.
- The student may have more than one site during a clinical rotation.
- The student may have more than one supervisor.
- (Summers-Only students) The two Practica may be at the same site.
- See the CSD Graduate Student Handbook for details regarding withdrawing from a clinical rotation and/or requesting to switch sites.
- See the CSD Graduate Student Handbook for details regarding dismissal from a clinical rotation.
- See the CSD Graduate Student Handbook for details regarding GPA Requirements and Course Repeat Policy.
- See CSD Graduate Student Handbook for details regarding Clinical Performance Plans.

CSD 602 Guidelines revised: July 13, 2013
CSD 602 Clinical Practicum in Speech-Language Pathology

CURRENT SYLLABUS

NAU dates: January 13, 2014 – May 2, 2014

GENERAL INFORMATION

Name of College: College of Health and Human Services
Name of Department: Communication Sciences & Disorders
Course: CSD 602 Clinical Practicum in Speech-Language Pathology
Semester/Year: Spring 2014
Credit hours: 3
Course level: Graduate
Instructor's name: Kimberly A. Farinella, Ph.D., CCC-SLP
Clinical Associate Professor
Clinic Director

NAU Faculty

Kim Farinella, PhD, CCC-SLP
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Michael.Skelton@nau.edu 928-523-0868
Anna Sosa, PhD, CCC-SLP
Anna.Sosa@nau.edu 928-523-3845

Office address: Communication Sciences & Disorders
208 E. Pine Knoll Drive
PO Box: 15045
Flagstaff, AZ 86011
CSD 602 Clinical Practicum in Speech-Language Pathology

Office hours: Monday-Friday, 8 to 5
Email responses: Monday-Friday, 8 to 5

NAU CONTACT PHONE NUMBERS

Kim Farinella, Ph.D., CCC-SLP
Kim.farinella@nau.edu
928-523-4699

Donna Summerfelt, MA (CSD office)
speech@nau.edu
928-523-2969
928-523-0034 fax

COURSE POLICIES

Students are responsible for following all policies and procedures associated with Northern Arizona University and the Department of Communication Sciences & Disorders. Policies and procedures may be changed at the discretion of Northern Arizona University and/or the Department of Communication Sciences & Disorders. CSD students are responsible to follow the most recent CSD Graduate Student Handbook. Students will be notified of any CSD changes. The CSD Graduate Student Handbook is a living document and is posted on the CSD website. Students are expected to follow:

- NAU Graduate College Policies: http://nau.edu/GradCol/Student-Resources/Current-Students/Policies/
- CSD Graduate Student Handbook: www.nau.edu/chhs/csd > CSD Graduate Student Handbook
- Overview of some NAU policy statements: http://www4.nau.edu/vpaa/UCCPolicy/plcystmt.html
- The course syllabus
- Blackboard Learn postings
- Emails sent by the instructor
- Expectations of individual supervisors
- The NAU Speech-Language-Hearing Clinic Manual (Full-time students only; if assigned to the clinic)

COURSE DUE DATES

Dates at a glance:

Instruction begins: January 13, 2014
Mid-session CCE due: March 3, 2014
Last day of instruction: May 2, 2014
End-of-session requirements due on or before: May 2, 2014
Grades submitted: May 2, 2014
CSD 602 Clinical Practicum in Speech-Language Pathology

Grades start posting on transcript: May 16, 2014

Always use the most updated forms, which are located on the CSD website!

Return items to:
Northern Arizona University
Communication Sciences & Disorders
208 E. Pine Knoll Drive
PO Box: 15045
Flagstaff, AZ 86011

**Mid-session requirements:**

<table>
<thead>
<tr>
<th># forms used in the course</th>
<th># forms student mails/drops off to the CSD office – originals only</th>
<th># forms CSD emails to the student at mid-session</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>Clinical Competency Evaluation (CCE)</td>
<td></td>
</tr>
</tbody>
</table>

**End of session requirements:**

<table>
<thead>
<tr>
<th># forms used in course</th>
<th># forms student mails/drops off to the CSD office – originals only</th>
<th># forms NAU e mails to the student at end-of-session</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>9 Bundle for CSD Office to review (5) Daily Log - including</td>
<td>1 Supervisor/Course evaluation – extremely important for annual reports</td>
</tr>
<tr>
<td></td>
<td>Total Minutes sheet Summary form Current Clinical Rotation Hours Towards AZ Licensure Synopsis of AZ Licensure – all students</td>
<td></td>
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<tr>
<td></td>
<td>Bundle for course instructor to review (4) Caseload Feedback</td>
<td></td>
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<tr>
<td></td>
<td>Clinical Competency Evaluation (CCE)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reflective Review</td>
<td></td>
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</tbody>
</table>
CSD 602 Clinical Practicum in Speech-Language Pathology

The end-of-session procedure:

- The CSD Office will check your paperwork. If complete, they will give the course instructor the paperwork.
- Your grade is assigned and you will be emailed by your instructor.
- Your grade is submitted to the Registrar. Check your transcript.
- It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student’s paperwork is not turned in on time, the student receives an “Incomplete” grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the form is sent to the Registrar and the new grade appears on the student’s transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. New clinical hours may not be logged until the grade appears on the transcript.

COURSE PREREQUISITES

Read ASHA Code of Ethics
Read Standards for the Certificate of Clinical Competence (ASHA)
Completion of required graduate course work as indicated on your Program of Study
Completion of CSD 510 with a grade of B or better
Completion of the four foundational science courses
  - Time extended for students completing a Summer 2014 Externship
Completion of the Practicum Information form – new one each rotation!
Completion of the Registration Checklist – new one each rotation!

Northern Arizona University guarantees each site that the items on the Registration Checklist are current. A student is not to be present in the facility unless all items on the checklist are current.

- See CSD Graduate Student Handbook for information pertaining to Waivers from the site pertaining to immunizations/shots/blood draws for religious, philosophical, or medical reasons.
- Exception: Summers-Only students may be at their employment site but may not accrue hours.
- It is the responsibility of the student to be aware of expiration dates and renew items in a timely manner.

The following procedure will be strictly enforced with regard to expiration dates:

- 1st: If an item becomes expired, the supervisor at the site will be contacted and told that the student is not allowed to be present at the site.
- 2nd: The student may become administratively dropped from the course.
COURSE DESCRIPTION

Students enrolled in CSD 602 will apply theoretical concepts to assess, diagnose, and manage individuals with speech, language, and hearing disorders. Students will further their clinical knowledge base necessary for successful completion of the National Examination in Speech Pathology and Audiology (PRAXIS). Individual speech-language diagnostic and therapy sessions will be arranged by the ASHA certified supervisor and the practicum student. The Clinical Practicum will be completed in the sites identified to meet the requirements of competencies in child and adult hours.

FORMS/DOCUMENTS ASSOCIATED WITH THIS COURSE

Posted on Blackboard Learn
- Syllabus

Posted on the CSD website: [http://www.nau.edu/CHHS/CSD/Student-Resources/Forms/](http://www.nau.edu/CHHS/CSD/Student-Resources/Forms/).
- ASHA Code of Ethics
- Caseload Feedback
- Clinical Competency Evaluation for Speech-Language Pathology
- Daily Log (including Total Minutes sheet, Summary form, Current Clinical Rotation Hours Towards AZ Licensure, and Synopsis of AZ Licensure)
- Reflective Review
- Self-evaluation
- Standards for the Certificate of Clinical Competence in Speech-Language Pathology (ASHA)

Forms associated with this course (emailed to the student by NAU at the end of your course)
- Supervisor Evaluation/Course Evaluation

ASSESSMENT OF STUDENT LEARNING OUTCOMES

The supervisor completes the following form which is submitted by the student:
- Clinical Competency Evaluation form: examines attainment of competencies required by the American Speech-Language-Hearing Association in the areas of assessment, intervention, and interaction/personal qualities. Supervisors will determine competency at mid-session and end-of-session using this form. This form is the only form that the supervisor needs to complete.

The student completes and submits the following forms:
CSD 602 Clinical Practicum in Speech-Language Pathology

- Caseload Feedback form: utilized to determine number of direct contact hours obtained at the site and supervisor information.
- Course evaluation/Supervisor evaluation: student evaluation of the course/supervisor (e mailed to student by CSD department)
- Daily Log (including Total Minutes, Summary form, Current Clinical Rotation Hours Towards AZ Licensure, and Synopsis of AZ Licensure): records direct contact hours obtained in nine content areas, child/adult treatment, and child/adult evaluation.
- Reflective Review: student reports how well NAU prepared them for the rotation and provides some general supervisor feedback.
- Self-Evaluation: student reports strengths and areas needing improvement.

STUDENT LEARNING EXPECTATIONS/OUTCOMES FOR THIS COURSE

Standard IV : Knowledge Outcomes
Demonstrate knowledge of basic human communication and swallowing processes, including the appropriate biological, neurological, acoustic, psychological, developmental, and linguistic and cultural bases. Demonstrate the ability to integrate information pertaining to normal and abnormal human development across the life span.

Standard IV-C
Demonstrate knowledge of communication and swallowing disorders and differences, including the appropriate etiologies, characteristics, anatomical/physiological, acoustic, psychological, developmental, and linguistic and cultural correlates in the following areas:

Articulation
Fluency
Voice and resonance, including respiration and phonation
Receptive and expressive language (phonology, morphology, syntax, semantics, pragmatics, prelinguistic communication and paralinguistic communication) in speaking, listening, reading, writing
Hearing, including the impact on speech and language
Swallowing (oral, pharyngeal, esophageal, and related functions, including oral function for feeding, orofacial myology)
CSD 602 Clinical Practicum in Speech-Language Pathology

Cognitive aspects of communication (attention, memory, sequencing, problem-solving, executive functioning)

Social aspects of communication (including challenging behavior, ineffective social skills, and lack of communication opportunities)

Augmentative and alternative communication modalities

Standard IV-D
Demonstrate current knowledge of the principles and methods of prevention, assessment, and intervention for people with communication and swallowing disorders, including consideration of anatomical/physiological, psychological, developmental, and linguistic and cultural correlates.

Standard IV-E
Demonstrate knowledge of standards of ethical conduct.

Standard IV-F
Demonstrate knowledge of processes used in research and of the integration of research principles into evidence-based clinical practice.

Standard IV-G
Demonstrate knowledge of contemporary professional issues.

Standard IV-H
Demonstrate knowledge of entry level and advanced certifications, licensure, and other relevant professional credentials, as well as local, state, and national regulations and policies relevant to professional practice.

Standard V-A
Demonstrate skills in oral and written or other forms of communication sufficient for entry into professional practice.
Standard V-B
Demonstrate experiences sufficient in breadth and depth to achieve the following skills outcomes:

1. Evaluation
   a. Conduct screening and prevention procedures (including prevention activities).
   b. Collect case history information and integrate information from clients/patients, family, caregivers, teachers, and relevant others, including other professionals.
   c. Select and administer appropriate evaluation procedures, such as behavioral observations, nonstandardized and standardized tests, and instrumental procedures.
   d. Adapt evaluation procedures to meet client/patient needs.
   e. Interpret, integrate, and synthesize all information to develop diagnoses and make appropriate recommendations for intervention.
   f. Complete administrative and reporting functions necessary to support evaluation.
   g. Refer clients/patients for appropriate services.

2. Intervention
   a. Develop setting-appropriate intervention plans with measurable and achievable goals that meet clients'/patients' needs. Collaborate with clients/patients and relevant others in the intervention process.
   b. Implement intervention plans (involve clients/patients and relevant others in the intervention process).
   c. Select or develop and use appropriate materials and instrumentation for prevention and intervention.
   d. Measure and evaluate clients'/patients' performance and progress.
   e. Modify intervention plans, strategies, materials, or instrumentation as appropriate to meet the needs of clients/patients.
   f. Complete administrative and reporting functions necessary to support intervention.
   g. Identify and refer clients/patients for services as appropriate.

3. Interaction and Personal Qualities
   a. Communicate effectively, recognizing the needs, values, preferred mode of communication, and cultural/linguistic background of the client/patient, family, caregivers, and relevant others.
   b. Collaborate with other professionals in case management.
   c. Provide counseling regarding communication and swallowing disorders to clients/patients, family, caregivers, and relevant others.
   d. Adhere to the ASHA Code of Ethics and behave professionally.

Standard V-C
Complete a minimum of 400 clock hours of supervised clinical experience in the practice of speech-language pathology. Twenty-five hours must be spent in clinical observation, and 375 hours must be
spent in direct client/patient contact.

Standard V-E
Supervision must be provided by individuals who hold the Certificate of Clinical Competence in the appropriate profession. The amount of direct supervision must be commensurate with the student’s knowledge, skills, and experience, must not be less than 25% of the student’s total contact with each client/patient, and must take place periodically through the practicum. Supervision must be sufficient to ensure the welfare of the client/patient.

Standard V-F
Supervised practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities.

COURSE STRUCTURE/APPROACH

To obtain clinical competency, as determined by ASHA, a graduate student must complete a minimum of 400 clinical clock hours of supervised clinical experience in the practice of speech-language pathology. The student must obtain 375 clinical hours in direct client/patient contact and 25 hours in clinical observation. At least 325 of the 400 clock hours must be completed while the student is engaged in graduate study. Direct supervision must be in real time and must never be less than 25% of the student’s total contact with each client/patient and must take place periodically throughout the practicum. These are minimum requirements and should be adjusted upward if the student’s level of knowledge, experience, and competence warrants. Supervisors sign off for the 25% time observed and for other hours obtained at the site, although not necessarily observed. Supervision must be provided by an individual (or individuals) who hold a current Certificate of Clinical Competence in Speech-Language Pathology and/or Audiology.

Supervised Clinical Practicum must include experience with client/patient populations across the life span and from culturally/linguistically diverse backgrounds. Practicum must include experience with client/patient populations with various types and severities of communication and/or related disorders, differences, and disabilities. The student must complete a practicum that includes supervised clinical experiences sufficient in breadth and depth in evaluation, intervention, and interaction/personal qualities.

TEXTBOOK AND REQUIRED MATERIALS
CSD 602 Clinical Practicum in Speech-Language Pathology

- No textbook
- Readings required by your specific site
- ASHA website for complete information concerning the requirements of your particular state: http://www.asha.org/advocacy/state/

RECOMMENDED OPTIONAL MATERIALS/REFERENCES


Also: The N-CEP Compendium of Clinical Practice Guidelines and Systematic Reviews http://www.asha.org/members/ebp/compendium/N-CEP-background.htm

COURSE COMPLETION

Students follow the NAU calendar with regard to start and end dates of the session. The student needs to be present for a minimum of 135 on-site hours at the site. On-site hours are not documented/logged. On-site hours are not the same as direct contact hours. Students need to document direct client/patient clinical experiences on their electronic logs, which are submitted to the CSD Office at the end of the session. Direct contact hours include evaluation, treatment, and feedback meetings.

The practicum is completed following the NAU calendar dates and not when the student has achieved a specific number of direct contact hours. There is not a required number of direct client/patient hours required in the course.

Hours required in specific disorders, child/adult, and evaluation/treatment are regulated by three bodies: CSD/ASHA, the state of Arizona licensure, and the student’s specific state. CSD/ASHA requirements are delineated in the 2014 ASHA Standards and specific requirements are delineated on the student’s Program of Study and Daily Log (including Total Minutes and Summary form). Arizona Licensure requirements are delineated on the Synopsis of Arizona Licensure form. All students must meet the requirements on the Synopsis of Arizona Licensure form. A student’s state requirements are found on the ASHA website, www.asha.org/advocacy/state/.
CSD 602 Clinical Practicum in Speech-Language Pathology

It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student's paperwork is not turned in on time, the student receives an “Incomplete” grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the form is sent to the Registrar and the new grade appears on the student's transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. The student is not allowed to start the next clinical rotation or accrue hours until the student's grade appears on the transcript.

See CSD Graduate Student Handbook for complete details.

GRADING AND CLINICAL PERFORMANCE PLANS

- The supervisor completes the Clinical Competency Evaluation at mid-session and end-of-session.
- If at mid-session the student receives a grade of “C” or below, a Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the supervisor.
- The course instructor assigns the final grade. This is based on the CCE submitted by the supervisor and CSD course expectations/requirements stated in the syllabus. The course instructor may not raise a suggested CCE grade from the site supervisor, however, if the course instructor deems that the student has not achieved expected competencies, the course instructor may submit a lower grade.
- A grade of C or lower for the final grade will result in a repetition of the rotation, however, hours are still accrued, unless the supervisor refuses to sign the hours. A Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the next supervisor.
- If the student has more than 6 units of graduate work with a grade of “C” or below, the student cannot continue in the master's program, regardless of the grade point average.
- A student receiving a grade of “C” or below in a clinical rotation must repeat the course, unless this is the student's third grade of “C” or below, at which time the graduate college policy of dismissal from the graduate program will be recommended to the Graduate College.
- A student receiving a grade of “C” or below in a clinical rotation will be placed on a Clinical Performance Plan, unless this is the student's third grade of “C” or below, at which time the graduate college policy of dismissal from the graduate program will be recommended to the Graduate College. This Plan will be shared with the next supervisor.

See CSD Graduate Student Handbook > NAU Graduate College Policies > GPA Requirements and Course Repeat Policy for complete details.
CSD 602 Clinical Practicum in Speech-Language Pathology

See CSD Graduate Student Handbook > CSD Additional Information > Clinical Performance Plans for complete details pertaining to remediation.

**DISMISSAL FROM A CLINICAL ROTATION**

If the supervisor/course instructor deems that a student does not fulfill the “essential tasks of the job” and/or is not meeting the “standard of care” required to provide services, then the supervisor/course instructor may dismiss the student from the clinical rotation.

- It is recommended, but not required, that efforts are made to improve the student’s performance prior to the mid-session evaluation.
- Dismissal may take place at any time during the clinical rotation at the discretion of the supervisor.
- The earned grade at the time of dismissal will be submitted as the final grade.
- The student must comply with all other CSD policies, as designated in the CSD Graduate Student Handbook.

**ABSENCES**

If the student is unable to attend a session, the student is responsible for notifying the supervisor. The supervisor will determine the course of action. During times of highly contagious flu, the College of Health and Human Services encourages everyone not to expose others to flu-like symptoms. The supervisor will show consideration for absences taken due to flu.

**DISABILITY RESOURCES**

Services and accommodations are available at no cost to all NAU students. See their website for complete information: [www.nau.edu/dr](http://www.nau.edu/dr). For further details pertaining to eligibility, email DR@nau.edu, or call 928-523-8773. If eligibility is granted, the student will be provided with a letter that precisely states the terms of your accommodations. This letter is most effective when presented to the supervisor/instructor prior to the start of the course. If presented during the course, accommodations are provided only from the date following presentation of the letter. See CSD Graduate Student Handbook for details.

**CALENDARS**

- Registrar calendar: [http://nau.edu/Registrar/Important-Dates/](http://nau.edu/Registrar/Important-Dates/)
- Graduate College calendar: [http://nau.edu/GradCol/Deadlines/](http://nau.edu/GradCol/Deadlines/)
- Extended Campus calendar: [http://extended.nau.edu/Calendar.aspx](http://extended.nau.edu/Calendar.aspx)
CSD 602 Clinical Practicum in Speech-Language Pathology

PROFESSIONALISM AND PROFESSIONAL LETTERS
- Professional interactions, with faculty, staff, student workers, peers, fellow students, clinical rotation site individuals, and third parties are required by the Communication Sciences and Disorders Department.
  This includes communication that is face to face, by phone, emails, texts, letters, and other forms of communication.
- Clinical Competency Evaluation form: [www.nau.edu/chhs/csd > Student Resources > forms > Clinical Competency Evaluation form].

If a student is not complying with professionalism, the advisor or course instructor may send the student a Professionalism Letter. The Professionalism Letter will copy this section from the CSD Graduate Student Handbook and will include a brief statement about the situation. The Professionalism Letter will be discussed at the next faculty meeting. Receiving a Professionalism Letter may impact your recommendation to an externship site and/or your recommendations to a future place of employment.

SYNOPSIS OF ARIZONA LICENSURE FORM

All students are required to complete this form. Even if you will not be practicing in Arizona, our department writes a letter to your state affirming that you have met our state requirements. This form provides the student with an excellent overview of the direct contact hours that they are accruing. Accrued hours are entered on this form after each session.

OFFICE OF CURRICULUM, LEARNING DESIGN, AND ACADEMIC ASSESSMENT (OCLDAE)

All forms are analyzed by the department’s OCLDAE representative following the conclusion of the course. The CSD Department submits an annual report to the Office of Curriculum, Learning Design, and Academic Assessment. CSD’s Report may be viewed on-line at the Office of Assessment website, [http://www4.nau.edu/assessment/]. This report is annually emailed to all faculty, staff, and students.

CSD 602 GUIDELINES

Located on the CSD website: [www.nau.edu/chhs/csd > Student Resources > forms > 602 & 608 forms > CSD 602 Guidelines]
CSD 602 Clinical Practicum in Speech-Language Pathology

Supervision
Northern Arizona University requests that each supervisor assess a student’s performance by using our “Clinical Competency Evaluation” form at the mid-session and at the end-of-session. We do not make any other requests, as we believe that the site should choose the tasks that they expect of the student. Direct supervision must be in real time and must never be less than 25% of the student’s total contact with each client/patient and must take place periodically throughout the practicum. These are minimum requirements and should be adjusted upward if the student’s level of knowledge, experience, and competence warrants (Standard V-E).

On-site hours vs. Direct client/patient contact hours
The CSD Department follows the Arizona Board of Regents Academic Contact Hour Policy (ABOR Handbook, 2-206, Academic Credit). We refer to the time physically present at the site as “on-site” hours. On-site hours include meetings/lunches, etc. On-site hours are not documented/logged. Therefore, with regard to NAU Practica, since 1 unit of credit = a minimum of 45 on-site hours (per semester/session):

- Clinical Practicum (3 units of credit) = minimum of 135 on-site hours
- Some possibilities include:
  - over 15 weeks = minimum of 9 on-site hours/week
  - over 12 weeks = minimum of 11.25 on-site hours/week

On-site hours should not be confused with ASHA’s “direct client/patient contact” hours, which are documented/logged, electronically, by the student, and include evaluation, intervention, and feedback meetings. Report writing time is not included.

Items emailed to the supervisor at the start of the clinical rotation
- The course instructor emails the student: a Letter of Appreciation, the Syllabus, and the Clinical Competency Evaluation prior to the rotation. The student is to give these items to the supervisor prior to the start of the clinical rotation.
- The supervisor will receive, from the course instructor, after the session starts, the same Letter of Appreciation, the Syllabus, and the Clinical Competency Evaluation.

Achieving needed hours
- Students are not required to achieve a minimum number of hours, at a site, during any clinical rotation.
- Students do not need to acquire a certain number of “direct contact” hours before starting or completing a Clinical Practicum.
- Students need to advocate for themselves and make sure they are getting the hours that they need.
- Students need to have all of their hours by the conclusion of their Externship to meet the requirements of:
  - CSD/ASHA requirements as logged on the CSD Daily Logs form (some hours in each of the 9 major disorder areas of the Summary tab and a total of 400 hours, 25 which are observation)
  - Synopsis of AZ Licensure form (required by all students)
  - Any other specific requirements established by their particular state
CSD 602 Clinical Practicum in Speech-Language Pathology

- The student may only log hours during the NAU dates for the session listed on the first page of the syllabus.

Starting the clinical rotation
- The student must follow their Program of Study sequence with regard to completion of academic coursework prior to the clinical rotation.
- The student's previous clinical rotation must be completed, a grade given, and posted on the transcript to begin the next rotation.
- Clinical rotation dates are designated on the syllabus.
- The student must be registered for the course to be at the site.
- The student must be registered for the course to log direct contact hours.
- Completion of the four foundational science courses.
  - Time extended for students completing a Summer 2014 Externship.
- Unofficial and official transcripts must be submitted to the advisor to record on the KASA.

Site expectations
- The student is to follow procedures as outlined by the supervisor. Site expectations differ.
- The student is not required to be at the site during NAU holidays, NAU cancelled school days, or when sick. The student still needs to meet the required number of physical on-site hours at the site, unless instructed differently by the supervisor. All schedule and time adjustments must be approved by the supervisor.

Grading
- The supervisor completes the Clinical Competency Evaluation at mid-session and end-of-session.
- If at mid-session the student receives a grade of "C" or below, a Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the supervisor.
- The course instructor assigns the final grade. This is based on the CCE submitted by the supervisor and CSD course expectations/requirements stated in the syllabus. The course instructor may not raise a suggested CCE grade from the site supervisor, however, if the course instructor deems that the student has not achieved expected competencies, the course instructor may submit a lower grade.
- A grade of C or lower for the final grade will result in a repetition of the rotation, however, hours are still accrued, unless the supervisor refuses to sign the hours. A Clinical Performance Plan will be developed by the course instructor. The Plan will be approved by the student. The Plan will be shared with the next supervisor.

Student submission of mid-session CCE
- The student is responsible for submitting the mid-session CCE to the CSD office.

Student submission of end-of-session required paperwork
CSD 602 Clinical Practicum in Speech-Language Pathology

- The student is responsible for submitting the end-of-session paperwork to the CSD office.
- Tracking may be used but is not necessary.

**Ending the clinical rotation**

- It is not possible to extend a Clinical Practicum beyond the NAU end-of-session dates. If the student’s paperwork is not turned in on time, the student receives an “Incomplete” grade by the course instructor, which will later be changed to a letter grade when all paperwork has been approved. Then, a change of grade form is submitted by the course instructor to the Department Chair and the Dean to sign. Finally, the form is sent to the Registrar and the new grade appears on the student’s transcript. This process takes place after the next session begins. The student is responsible for checking the transcript and notifying the course instructor when the grade appears on the transcript. The student is not allowed to start the next clinical rotation or accrue hours until the student’s grade appears on the transcript.

**Additional student information**

- The syllabus will be on Blackboard Learn before the start of the session. It states all of the requirements for your course. Follow the dates!
- All required forms are on the CSD website. Do not use old forms, as they will be returned to you.
- Always refer to the most recent information given to you by NAU.
- The student may have more than one site during a clinical rotation.
- The student may have more than one supervisor.
- (Summers-Only students) The two Practica may be at the same site.
- See the CSD Graduate Student Handbook for details regarding withdrawing from a clinical rotation and/or requesting to switch sites.
- See the CSD Graduate Student Handbook for details regarding dismissal from a clinical rotation.
- See the CSD Graduate Student Handbook for details regarding GPA Requirements and Course Repeat Policy.
- See CSD Graduate Student Handbook for details regarding Clinical Performance Plans.

Revised: December 16, 2013
**FAST TRACK** *(Select if this will be a fast track item. Refer to Fast Track Policy for eligibility)*

*If the changes included in this proposal are significant, attach copies of original and proposed syllabi in approved university format.*

1. Course subject and number: **SUS 695**

   See upper and lower division undergraduate course definitions.

2. Units: **3**

3. College: **Social and Behavioral Sciences**

4. Academic Unit: **Sustainable Communities**

5. Current Student Learning Outcomes of the course.

   1. Examine and become familiar with successful programs, projects, and efforts that further the goal of achieving sustainable communities.
   2. Know key elements necessary for achieving and assessing sustainable communities.
   3. Share progress on capstone research and action projects and develop strategies to ensure that students' capstone work "matters" to a larger community.
   4. Foster networking skills and connections with local, national, and globally important individuals, organizations, and movements that are successfully working toward the achievement of sustainable communities (including previous SUS students).
   5. Develop skills and strategies for continuing to foster sustainable communities following graduation, including relevant professional development skills.
   6. Develop strong oral and written communication skills.

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Show the proposed changes in this column (if applicable). Bold the proposed changes in this column to differentiate from what is not changing, and Bold with strikethrough what is being deleted. *(Resources & Examples for Developing Course Learning Outcomes)*

**UNCHANGED**

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Effective Fall 2013
6. Current title, description and units. Cut and paste, in its entirety, from the current on-line academic catalog *

**SUS 695 ELEMENTS OF SUSTAINABLE COMMUNITIES: THEORY AND PRACTICE (3)**
Description: Examines several theories and practices that inform sustainable community life. Letter grade only. Prerequisite: completion of 21 hours in MLS program or MLS director's consent.

Units: 3

Show the proposed changes in this column **Bold** the proposed changes in this column to differentiate from what is not changing, and **Bold** with strikethrough what is being deleted.

**SUS 695 ELEMENTS OF ACHIEVING SUSTAINABLE COMMUNITIES: THEORY AND PRACTICE (3)**
Description: This course focuses on successful strategies for achieving sustainable communities. It highlights successful sustainability initiatives (locally and globally), and features both current and past SUS students' efforts to create change through their capstone projects – and beyond. The course also exposes students to sustainable community networks beyond the university and explores the diverse strategies for continuing to foster sustainable communities following graduation. **Examine several theories and practices that inform sustainable community life.** Letter grade only. Prerequisite: completion of 21 hours in MLS program or MLS director's consent.

Units: 3

*if there has been a previously approved UCC/UGC/ECCC change since the last catalog year, please copy the approved text from the proposal form into this field.

7. Justification for course change.
These changes to SUS 695 are a follow up to the comprehensive curricular changes we made last year. No course content is changing. Rather, we are giving a fuller description of the course, and changing the title so that it coheres with the curricular changes of the larger plan approved last year.

8. Effective BEGINNING of what term and year? Fall 2014

See effective dates calendar.

**IN THE FOLLOWING SECTION, COMPLETE ONLY WHAT IS CHANGING**

<table>
<thead>
<tr>
<th>CURRENT</th>
<th>PROPOSED</th>
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<tbody>
<tr>
<td><strong>Current course subject and number:</strong></td>
<td><strong>Proposed course subject and number:</strong></td>
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<tr>
<td><strong>Current number of units:</strong></td>
<td><strong>Proposed number of units:</strong></td>
</tr>
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<td><strong>Current short course title:</strong> <strong>ELEMENTS OF COMMUNITIES</strong></td>
<td><strong>Proposed short course title (max 30 characters):</strong> <strong>ACHIEVING SUSTAINABLE COMMUNITIES</strong></td>
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<tr>
<td><strong>Current long course title:</strong></td>
<td><strong>Proposed long course title (max 100 characters):</strong></td>
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Effective Fall 2013
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<th>ACHIEVING SUSTAINABLE COMMUNITIES</th>
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<tr>
<td>Current grading option: letter grade ☐ pass/fail ☐ or both ☐</td>
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<td>Current repeat for additional units:</td>
<td>Proposed repeat for additional units:</td>
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<td>Current max number of units:</td>
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<td>Current prerequisite:</td>
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<tr>
<td>Current co-requisite:</td>
<td>Proposed co-requisite (include rationale in the justification):</td>
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<td>Current co-convene with:</td>
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<td>Current cross list with:</td>
<td>Proposed cross list with:</td>
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9. Is this course in any plan (major, minor, or certificate) or sub plan (emphasis)? Yes ☒ No ☐
   If yes, describe the impact. If applicable, include evidence of notification to and/or response from each impacted academic unit.

**Sustainable Communities MA**

10. Is there a related plan or sub plan change proposal being submitted? Yes ☐ No ☒
    If no, explain.

   **These course title and description changes will not require a related plan change proposal.**

11. Does this course include combined lecture and lab components? Yes ☐ No ☒
    If yes, include the units specific to each component in the course description above.

**Answer 12-15 for UCC/ECCC only:**

12. Is this course an approved Liberal Studies or Diversity course? Yes ☐ No ☒
    If yes, select all that apply. Liberal Studies ☐ Diversity ☐ Both ☐

13. Do you want to remove the Liberal Studies or Diversity designation? Yes ☐ No ☒
    If yes, select all that apply. Liberal Studies ☐ Diversity ☐ Both ☐

14. Is this course listed in the **Course Equivalency Guide**? Yes ☐ No ☐

15. Is this course a **Shared Unique Numbering (SUN) course**? Yes ☐ No ☐

**FLAGSTAFF MOUNTAIN CAMPUS**

Scott Galland 1/23/2014

Effective Fall 2013
US Citizens and Legal Residents applying for graduate school at Northern Arizona University must:
- complete the online application for Graduate Admission (includes program requirements).
- pay a $65 non-refundable application fee ($35 if applying for admission as a non-degree student).
- attach unofficial transcripts, to the Graduate College application from institutions where a bachelor’s degree (and graduate degrees, if applicable) is in progress, or was awarded. Unofficial transcripts are required as part of the online application. If admitted to a program, official transcripts will be required at that time.
- if the degree in progress or awarded degree(s) was received at a non-U.S. institution, attach unofficial transcripts to the online application, and send official, sealed transcripts, in the language of instruction to the Graduate College. If the language of instruction is not English, then an official English translation of the transcript is also required. Applicants in certain programs may be required to submit English proficiency exam scores on the TOEFL exam.

International students applying for graduate school at Northern Arizona University must:
- complete the online Application for Graduate Admission.
- pay a $65 nonrefundable application processing fee.
- attach unofficial transcripts to the online application, and send official, sealed transcripts to the Graduate College. Transcripts must be in the original language of the issuing country with an English translation vetted by the issuing institution. Official transcripts must include verification of graduation. If the degree/diploma is not posted on the transcripts, a separate degree certificate must be included and indicate the degree awarded and date in which it was awarded.
- submit official scores on the TOEFL exam. The University requires a minimum TOEFL score of 80 on the Internet-based test or 550 on the paper-based test (some programs accept the IELTS and NAU requires a minimum IELTS score of 7.0)
- some programs require a TOEFL/IELTS score that is higher than the University minimum (refer to the list available on the Graduate College Admissions page).
- TOEFL/IELTS is waived for the following international applicants (see exceptions below):
  - Native speaker of English. For the purposes of this policy, native speakers of English are considered graduates from a high school or university in which the language of primary instruction is English. (Students in this category must provide this additional information).
  - Earned a bachelor's or higher degree from a U.S. university.
- EXCEPTION TO THE TOEFL/IELTS WAIVER POLICY
  Regardless of where International students earned their bachelor or graduate degree(s), all applicants to the MA-TESL program or the PhD program in Applied Linguistics who are non-native English speakers must submit current, official TOEFL or IELTS scores (no more than 2 years old).

Official transcripts must be submitted to:
Graduate College
PO Box 4125
Flagstaff, AZ 86011-4125
Phone: 928-523-4348

Additional Information:
- Transcripts are not required if applying as a non-degree seeking student.
• International graduate students must follow all additional international applicant guidelines outlined on Graduate College website: http://nau.edu/GradCol/Admissions/International.

• Please refer to the Applications Deadline page on the Graduate College website listing application deadlines for each program: http://nau.edu/GradCol/Admissions/International/Application-Deadlines.

• More information about applying to Northern Arizona University graduate programs can be found on the Graduate College website.
To apply for graduate school to a graduate program or certificate at Northern Arizona University, an applicant must:

US Citizens and Legal Residents applying for graduate school at Northern Arizona University must:

- complete the online Application for Graduate Admission (includes departmental program requirements); and
- pay a $65 nonrefundable application processing fee (currently $65 for each degree/certificate application and $35 for admission as a non-degree student); and
- attach unofficial transcripts, to the Graduate College application from institutions where a bachelor's degree (and graduate degrees, if applicable) is in progress, or was awarded. Unofficial transcripts are required as part of the online application. If admitted to a program, official transcripts will be required at that time. Submit official transcripts (see notes below) from the universities where an applicant received a bachelor's degree (and graduate degrees if applicable).
- If the degree in progress or awarded degree(s) was received at a non-U.S. institution, attach unofficial transcripts to the online application, and send them from outside of the U.S. (bachelor's and/or graduate) you must submit official, sealed -transcripts in the original language of the instruction to the Graduate College. If the language of instruction is not English, than an official institution along with an English translation of the transcript is also required. (If applicable) from these universities when you submit your application for admission. Applicants in certain programs may be required to submit English proficiency exam scores on the TOEFL exam.

Please note:

- For domestic applicants, admission applications are reviewed based upon your unofficial transcript submitted as part of the online application to a graduate program. Official transcripts are required upon acceptance of the offer of admission to a graduate program.
- If the degree received is from outside of the U.S. (bachelor's and/or graduate) you must submit official transcripts in the original language of the institution along with an English translation (if applicable) from these universities when you submit your application for admission.
- Official transcripts are not required for course work completed at Northern Arizona University.
- Transcripts are not required for a non-degree applicant.
- Paper admission applications are strongly discouraged and are not accepted by many graduate programs at NAU. If there are circumstances which make it very difficult to complete the online application, please email the Graduate College at graduate@nau.edu for information on applying.
International students applying for graduate school at Northern Arizona University must:

- complete the online Application for Graduate Admission.
- pay a $65 nonrefundable application processing fee.
- attach unofficial transcripts to the online application, and send official, sealed transcripts to the Graduate College. Transcripts must be in the original language of the issuing country with an English translation vetted by the issuing institution. Official transcripts must include verification of graduation. If the degree/diploma is not posted on the transcripts, a separate degree certificate must be included and indicate the degree awarded and the date in which it was awarded.
- submit official scores on the TOEFL exam. The University requires a minimum TOEFL score of 80 on the Internet-based test or 550 on the paper-based test (some programs accept the IELTS and NAU requires a minimum IELTS score of 7.0).
- some programs require a TOEFL/IELTS score that is higher than the University minimum (refer to the list available on the Graduate College Admissions page).
- TOEFL/IELTS is waived for the following international applicants (see exceptions below):
  - Native speaker of English. For the purposes of this policy, native speakers of English are considered graduates from a high school or university in which the language of primary instruction is English. (*Students in this category must provide this additional information.*)
  - Earned a bachelor's or higher degree from a U.S. university.

**Exception to the TOEFL/IELTS Waiver Policy:**

*International students who are non-native English speakers who are applying to the MA-TESL program or the PhD program in Applied Linguistics must submit current, official TOEFL or IELTS scores (no more than 2 years old).*

Regardless of where International students earned their bachelor or graduate degree(s), all applicants to the MA-TESL program or the PhD program in Applied Linguistics who are non-native English speakers must submit current, official TOEFL or IELTS scores (no more than 2 years old).

The application and Official transcripts are must be submitted to:

Graduate College
PO Box 4125
Flagstaff, AZ 86011-4125
Phone: 928-523-4348

Additional Information:

- Transcripts are not required if applying as a non-degree seeking student.
- International graduate students must follow all additional international applicant guidelines outlined on Graduate College website: https://nau.edu/GradCol/Admissions/International

Please refer to the Applications Deadline page on the Graduate College website listing application deadlines for each program: https://nau.edu/GradCol/Admissions/International/Application-Deadlines

Contact the department in which you wish to study for specific departmental application materials and requirements and evaluation criteria, including deadlines.

If you apply online, More information about applying to Northern Arizona University graduate programs can be found on the Graduate College website.

Approved by UGC, January 18, 2012 March 12, 2014