I. Minutes from previous meeting – February 9, 2010

II. Consent Items

<table>
<thead>
<tr>
<th></th>
<th>Course Code</th>
<th>Course Title</th>
<th>Effective Date</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The College of Engineering, Forestry and Natural Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>BIO 479</td>
<td>Ecosystem Ecology: Case Studies on the Colorado Plateau</td>
<td>Fall 2010</td>
<td>Course Title</td>
</tr>
<tr>
<td></td>
<td>BIO</td>
<td>479</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>EE 325</td>
<td>Engineering Analysis II</td>
<td>Fall 2010</td>
<td>Coreqs, Prereqs</td>
</tr>
<tr>
<td></td>
<td>EE</td>
<td>325 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>EE 434</td>
<td>Wireless Communication and Networking</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>EE</td>
<td>434</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>EE 435</td>
<td>Error Correcting Codes</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>EE</td>
<td>435</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>EE 476C</td>
<td>Project Design Procedures</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>EE</td>
<td>476C</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>EE 483</td>
<td>Analog and Mixed Signal Circuits</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>EE</td>
<td>483</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>EGR 186</td>
<td>Introduction to Engineering Design</td>
<td>Fall 2010</td>
<td>Catalog Descr, Coreqs, Prereqs</td>
</tr>
<tr>
<td></td>
<td>EGR</td>
<td>186 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>EGR 186H</td>
<td>Introduction to Engineering Design</td>
<td>Fall 2010</td>
<td>Catalog Descr, Coreqs, Prereqs</td>
</tr>
<tr>
<td></td>
<td>EGR</td>
<td>186H 3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course Name</td>
<td>Semester</td>
<td>Description</td>
<td></td>
</tr>
<tr>
<td>------------</td>
<td>-------------------------------------------</td>
<td>----------</td>
<td>--------------------------------------</td>
<td></td>
</tr>
<tr>
<td>EGR 286</td>
<td>Engineering Design: The Process</td>
<td>Fall 2010</td>
<td>Catalog Descr</td>
<td></td>
</tr>
<tr>
<td>286</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOR 479</td>
<td>Ecosystem Ecology</td>
<td>Fall 2010</td>
<td>Course Title</td>
<td></td>
</tr>
<tr>
<td>479</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS Microbiology</td>
<td>Microbiology BS</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Content Emphasis in Mathematics</td>
<td>Elementary Education BSED</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Deleted, Major Reqmts-Unit Change</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Content Emphasis in Mathematics</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Construction Management Minor</td>
<td>Construction Management Minor</td>
<td>Fall 2010</td>
<td>Minor Reqmts-Course(s) Added, Minor Reqmts-Course(s) Deleted, Minor Reqmts-Unit Change</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>B. The College of Social and Behavioral Sciences</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SW 420</td>
<td>Welfare Policy Analysis and Planning</td>
<td>Fall 2010</td>
<td>Catalog Descr, Course Title</td>
<td></td>
</tr>
<tr>
<td>420</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Minor Environmental Communication</td>
<td>Environmental Communication Minor</td>
<td>Fall 2010</td>
<td>Minor Reqmts-Course(s) Added, Minor Reqmts-Course(s) Deleted, Minor Reqmts-Unit Change</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C. Undergraduate Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FOR 254</td>
<td></td>
<td>Fall 2010</td>
<td>Remove LibStud</td>
<td></td>
</tr>
<tr>
<td>254</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ARH 344</td>
<td></td>
<td>Fall 2010</td>
<td>Change LS Distrib Block</td>
<td></td>
</tr>
<tr>
<td>344</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>EDF 301W</td>
<td></td>
<td>Fall 2010</td>
<td>Remove SPW LS Designation</td>
<td></td>
</tr>
<tr>
<td>301W</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
### D. The College of Health and Human Services

| 1. | BS Health Sciences (Allied Health)  
BS Health Sciences (Allied Health)  
Allied Health | Fall 2010 | Major Reqmts-Unit Change |
| 2. | BS Health Sciences (Diagnostic Medical Imaging)  
BS Health Sciences (Diagnostic Medical Imaging Technology)  
Diagnostic Medical Imaging Technology | Fall 2010 | Major Reqmts-Unit Change |
| 3. | BS Health Sciences (Medical Assisting)  
BS Health Sciences (Medical Assisting)  
Medical Assisting | Fall 2010 | Major Reqmts-Unit Change |
| 4. | BS Health Sciences (Paramedic Care)  
BS Health Sciences (Paramedic Care)  
Paramedic Care | Fall 2010 | Major Reqmts-Unit Change |
| 5. | BS Health Sciences (Physical Therapist Assisting)  
BS Health Sciences (Physical Therapist Assisting)  
Physical Therapist Assisting | Fall 2010 | Major Reqmts-Unit Change |
| 6. | BS Health Sciences (Respiratory Care)  
BS Health Sciences (Respiratory Care)  
Respiratory Care | Fall 2010 | Major Reqmts-Unit Change |
| 7. | BS Health Sciences (Surgical Technology)  
BS Health Sciences (Surgical Technology)  
Surgical Technology | Fall 2010 | Major Reqmts-Unit Change |

### III. Action Items

#### A. College of Engineering, Forestry and Natural Sciences

| 1. | BIO 484  
BIO 484  
4 BIOMEDICAL HISTOLOGY | Fall 2010 | New Course |
| 2. | BIO 426C  
BIO 426C  
3 Plant Physiology | Fall 2010 | Catalog Descr, Course Title, Prereqs |
B. The College of Arts and Letters

<table>
<thead>
<tr>
<th></th>
<th>Program</th>
<th>Start</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td><strong>CVC 100</strong> CVC 100 15 Screenings: Film and the Big Screen Experience</td>
<td>Fall 2010</td>
<td>New Course</td>
</tr>
<tr>
<td>2</td>
<td><strong>Certificate in Creative Writing</strong> Creative Writing Certificate</td>
<td>Fall 2010</td>
<td>New Plan</td>
</tr>
<tr>
<td>3</td>
<td><strong>Certificate in Linguistics</strong> Linguistics Certificate</td>
<td>Fall 2010</td>
<td>New Plan</td>
</tr>
<tr>
<td>4</td>
<td><strong>Certificate in Literature</strong> Literature Certificate</td>
<td>Fall 2010</td>
<td>New Plan</td>
</tr>
<tr>
<td>5</td>
<td><strong>Certificate in Rhetoric and Writing</strong> Rhetoric and Writing Certificate</td>
<td>Fall 2010</td>
<td>New Plan</td>
</tr>
<tr>
<td>6</td>
<td><strong>BSED Art Education</strong> Art Education BSED</td>
<td>Fall 2010</td>
<td>MajorReqmts-Unit Change</td>
</tr>
</tbody>
</table>
I. Minutes from previous meeting – January 26, 2010 – minutes approved as presented.

II. Consent Items – item II.B. 5 moved to March 2 meeting; all other items approved as presented.

### A. The College of Arts and Letters

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>Units</th>
<th>Effective Date</th>
<th>Summary of Changes</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUM 272</td>
<td>HUM 272 Foundations of Arts and Religion</td>
<td>Fall 2010</td>
<td>Course Title</td>
<td></td>
</tr>
<tr>
<td>MUS 200</td>
<td>MUS 200 Prelude to Music Education</td>
<td>Fall 2010</td>
<td>Units</td>
<td></td>
</tr>
<tr>
<td>REL 365</td>
<td>REL 365 Religion and Film</td>
<td>Fall 2010</td>
<td>Number, Prereqs</td>
<td></td>
</tr>
<tr>
<td>BA Art History</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added, Major Reqmts-Course(s) Deleted</td>
<td>Support_Link</td>
<td></td>
</tr>
<tr>
<td>BA Humanities</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added, Major Reqmts-Course(s) Deleted</td>
<td>Support_Link</td>
<td></td>
</tr>
<tr>
<td>BA Music</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added</td>
<td>Support_Link</td>
<td>8 Term Plan: BA Music 8 term plan</td>
</tr>
</tbody>
</table>
7. **BA Spanish**  
   **BA Spanish**  
   Fall 2010  
   Major Reqmts-Course(s) Added,  
   Major Reqmts-Course(s) Deleted,  
   Minor Reqmts-Course(s) Deleted  
   Support Link  
   8 Term Plan:

8. **BA Spanish Extended Major**  
   **BA Spanish Extended Major**  
   Fall 2010  
   Major Reqmts-Course(s) Added,  
   Major Reqmts-Course(s) Deleted,  
   Minor Reqmts-Course(s) Deleted  
   Support Link  
   8 Term Plan:

9. **BMUS: Instrumental Music**  
   **BMUS: Instrumental Music**  
   Fall 2010  
   Major Reqmts-Course(s) Added,  
   Major Reqmts-Unit Change  
   Support Link  
   8 Term Plan:  
   BMUS: Instrumental Music 8 term plan

10. **BMUS: Vocal Music**  
    **BMUS: Vocal Music**  
    Fall 2010  
    Major Reqmts-Course(s) Added  
    Support Link  
    8 Term Plan:  
    BMUS: Vocal Music 8 term plan

11. **B.F.A. Jewelry and Metalsmithing**  
    **B.F.A. Jewelry and Metalsmithing**  
    Fall 2010  
    Delete Plan  
    Support Link  
    8 Term Plan:

12. **Cinema and Visual Culture**  
    **Cinema and Visual Culture**  
    Fall 2010  
    Minor Reqmts-Course(s) Added,  
    Minor Reqmts-Course(s) Deleted  
    Support  
    8 Term

**B. The College of Engineering, Forestry and Natural Sciences**

1. **BIO 182**  
   **BIO**  
   182  
   Unity of Life II: Lives of Multicellular Organisms  
   Fall 2010  
   Prereqs

2. **BIO 401C**  
   **BIO**  
   401  
   Immunobiology  
   Fall 2010  
   Prereqs
| 3. | BIO 477  
| BIO | 477 | 3 | Fish Management | Fall 2010 | Prereqs |
| 4. | BIO 478  
| BIO | 478 | 3 | Wildlife Management | Fall 2010 | Prereqs |
| 5. | BIO 479  
| BIO | 479 | 3 | Ecosystem Ecology: Case Studies on the Colorado Plateau | Fall 2010 | Course Title |
| 6. | CM 124  
| CM | 124 | 3 | Construction Methods II | Fall 2010 | Prereqs |
| 7. | CM 222  
| CM | 222 | 3 | Construction Graphics | Fall 2010 | Prereqs |
| 8. | CM 329  
| CM | 329 | 3 | Construction Estimating and Bidding | Fall 2010 | Prereqs |
| 9. | FOR 220  
| FOR | 220 | 3 | Introduction to Forest and Range Plants | Fall 2010 | Grading Option |
| 10. | FOR 479  
| FOR | 479 | 3 | Ecosystem Ecology | Fall 2010 | Course Title |
| 11. | FOR 254  
| FOR | 254 | 3 | Introduction to Forest Health | Spring 2010 | Delete Course |
| 12. | BS Construction Management  
| BS Construction Management | Fall 2010 | Major Reqmts-Course(s) Added, Major Reqmts-Course(s) Deleted, Major Reqmts-Unit Change | Support Link  
| 8 Term Plan: BS Construction Management 8 Term Plan |

C. The College of Social and Behavioral Sciences

| 1. | AIS 304  
<p>| AIS | 304 | 3 | Indigenous/State Relations-Comparative Global Contexts | Fall 2010 | Prereqs |</p>
<table>
<thead>
<tr>
<th></th>
<th>Course Code</th>
<th>Credits</th>
<th>Course Title</th>
<th>Term</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.</td>
<td>ANT 309W</td>
<td>3</td>
<td>Cultural Anthropology</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>ANT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>ANT 329</td>
<td>3</td>
<td>Language in Society</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>ANT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>ANT 359W</td>
<td>3</td>
<td>Proseminar in Archaeology</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>ANT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>ANT 379</td>
<td>3</td>
<td>Biological Anthropology</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>ANT</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>CCJ 450C</td>
<td>4.5</td>
<td>Values in Criminal Justice</td>
<td>Fall 2010</td>
<td>Course Title, Prereqs</td>
</tr>
<tr>
<td></td>
<td>CCJ</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>COM 383</td>
<td>3</td>
<td>Topics in Cinema</td>
<td>Fall 2010</td>
<td>Catalog Descr, Number, Prereqs, Subject</td>
</tr>
<tr>
<td></td>
<td>COM</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>EMF 226</td>
<td>3</td>
<td>Television Production</td>
<td>Fall 2010</td>
<td>Catalog Descr, Course Title</td>
</tr>
<tr>
<td></td>
<td>EMF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>EMF 326</td>
<td>3</td>
<td>Electronic Media and Film Filed Video Production</td>
<td>Fall 2010</td>
<td>Course Title, Prereqs</td>
</tr>
<tr>
<td></td>
<td>EMF</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>PHO 285</td>
<td>3</td>
<td>Intermediate Photography</td>
<td>Fall 2010</td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>PHO</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>POS 440</td>
<td>3</td>
<td>Campaigns and Elections</td>
<td>Fall 2010</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>POS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>POS 472</td>
<td>3</td>
<td>Studies in Middle Eastern Politics</td>
<td>Fall 2010</td>
<td>Number</td>
</tr>
<tr>
<td></td>
<td>POS</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>SOC 408</td>
<td>3</td>
<td>Internship</td>
<td>Summer 2010</td>
<td>Catalog Descr, Prereqs, Repeat Rule</td>
</tr>
<tr>
<td>Course Code</td>
<td>Section</td>
<td>Credits</td>
<td>Term</td>
<td>Description</td>
<td>Notes</td>
</tr>
<tr>
<td>-------------</td>
<td>---------</td>
<td>---------</td>
<td>------</td>
<td>-------------------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>SW 498C</td>
<td>498</td>
<td>3</td>
<td>Fall 2010</td>
<td>Senior Seminar</td>
<td>Catalog Descrip, Prereq</td>
</tr>
<tr>
<td>POS 321</td>
<td>321</td>
<td></td>
<td>Summer 2010</td>
<td>American Public Law</td>
<td>Delete Course</td>
</tr>
<tr>
<td>POS 376</td>
<td>376</td>
<td></td>
<td>Fall 2010</td>
<td>Studies in North American Politics</td>
<td>Delete Course</td>
</tr>
<tr>
<td>SOC 408C</td>
<td>408</td>
<td></td>
<td>Fall 2010</td>
<td>Internship</td>
<td>Delete Course</td>
</tr>
<tr>
<td>BA AIS</td>
<td></td>
<td></td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Deleted, Text within Plan</td>
<td>Support Link</td>
</tr>
<tr>
<td>BS AIS</td>
<td></td>
<td></td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Deleted, Text within Plan</td>
<td>Support Link</td>
</tr>
<tr>
<td>BS AIS 8 term plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8 Term Plan: BA AIS 8 term plan</td>
</tr>
<tr>
<td>BS AIS 8 term plan</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8 Term Plan: BS AIS 8 term plan</td>
</tr>
<tr>
<td>B.S. Criminology and Criminal Justice</td>
<td></td>
<td></td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added, Major Reqmts-Course(s) Deleted, Text within Plan</td>
<td>Support Link</td>
</tr>
<tr>
<td>8 Term Plan: B.S. Criminology and Criminal Justice 8</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>8 Term Plan:</td>
</tr>
<tr>
<td>BS AIS Extended Major</td>
<td></td>
<td></td>
<td>Fall 2010</td>
<td>Delete Plan</td>
<td>Support Link</td>
</tr>
<tr>
<td>BS AIS Extended Major 8 Term Plan:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BS AIS Extended Major</td>
<td></td>
<td></td>
<td>Fall 2010</td>
<td>Delete Plan</td>
<td>Support Link</td>
</tr>
<tr>
<td>BS AIS Extended Major 8 Term Plan:</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Course Code</td>
<td>Course</td>
<td>Type</td>
<td>Semester</td>
<td>Year</td>
<td>Min Reqmts-Course(s) Added</td>
</tr>
<tr>
<td>-------------</td>
<td>--------</td>
<td>------</td>
<td>----------</td>
<td>------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>SWS 199</td>
<td>Special Topics</td>
<td>SWS</td>
<td>Fall 2010</td>
<td>Summer 2010</td>
<td>Delete Course</td>
</tr>
<tr>
<td>SWS 250</td>
<td>Images of the Southwest</td>
<td>SWS</td>
<td>Summer 2010</td>
<td>Delete Course</td>
<td></td>
</tr>
<tr>
<td>SWS 389</td>
<td>Cooperative Education (1-12)</td>
<td>SWS</td>
<td>Summer 2010</td>
<td>Delete Course</td>
<td></td>
</tr>
<tr>
<td>SWS 399</td>
<td>Special Topics (1-3)</td>
<td>SWS</td>
<td>Summer 2010</td>
<td>Delete Course</td>
<td></td>
</tr>
<tr>
<td>SWS 408</td>
<td>Fieldwork Experience (1-12)</td>
<td>SWS</td>
<td>Summer 2010</td>
<td>Delete Course</td>
<td></td>
</tr>
<tr>
<td>SWS 430</td>
<td>Hi Sch Teach Methods</td>
<td>SWS</td>
<td>Summer 2010</td>
<td>Delete Course</td>
<td></td>
</tr>
<tr>
<td>SWS 485</td>
<td>Undergraduate Research</td>
<td>SWS</td>
<td>Summer 2010</td>
<td>Delete Course</td>
<td></td>
</tr>
<tr>
<td>SWS 497</td>
<td>Independent Study</td>
<td>SWS</td>
<td>Summer 2010</td>
<td>Delete Course</td>
<td></td>
</tr>
<tr>
<td>SWS 499</td>
<td>Contemp Developments</td>
<td>SWS</td>
<td>Summer 2010</td>
<td>Delete Course</td>
<td></td>
</tr>
</tbody>
</table>

**C. NAU Yuma**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course</th>
<th>Type</th>
<th>Semester</th>
<th>Year</th>
<th>Prereqs</th>
</tr>
</thead>
<tbody>
<tr>
<td>PAS 408C</td>
<td>Internship for Public Agency Service</td>
<td>PAS</td>
<td>Fall 2010</td>
<td></td>
<td>Prereqs</td>
</tr>
<tr>
<td></td>
<td>Program/Subject</td>
<td>Term</td>
<td>Changes</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------</td>
<td>-------</td>
<td>-------------------------------------------------------------------------</td>
<td>--------------</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>BA BS Interdisciplinary Studies</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added, Text within Plan</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BA BS Interdisciplinary Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>BAS (Bachelor of Applied Science)</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added, Major Reqmts-Course(s) Deleted</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAS (Bachelor of Applied Science)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>BA BS Interdisciplinary Studies</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added, Text within Plan</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSBA Interdisciplinary Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Focus in Interdisciplinary Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>BA BS Interdisciplinary Studies</td>
<td>Fall 2010</td>
<td>Major Reqmts-Course(s) Added, Major Reqmts-Course(s) Deleted</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSBA Interdisciplinary Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Public Agency Management</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>BAS Administration of Justice</td>
<td>Fall 2010</td>
<td>Delete Plan</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAS Administration of Justice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>BAS Emergency Service</td>
<td>Fall 2010</td>
<td>Delete Plan</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BAS Emergency Service</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administration</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>BA BS Interdisciplinary Studies</td>
<td>Fall 2010</td>
<td>Delete Plan</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSBA Interdisciplinary Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Administration of Justice</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>BSBA Interdisciplinary Studies</td>
<td>Fall 2010</td>
<td>Delete Plan</td>
<td>Support Link</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BSBA Interdisciplinary Studies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Emergency Service)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
III. Action Items

A. College Health and Human Services – item approved as presented.

1. Basic Public Health Certificate
   Basic Public Health Certificate
   Fall 2010
   New Plan
   Support
   8 Term

B. NAU Yuma - item approved as presented.

1. BAS Public Agency Management
   BAS Public Agency Management
   Fall 2010
   Major Reqmts-Course(s) Added,
   Major Reqmts-Course(s) Deleted,
   Major Reqmts-Unit Change
   Support
   8 Term
### C. The College of Social and Behavioral Sciences - all items approved as presented.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Approval Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS 404</td>
<td>Senior Seminar in Strategic Analysis and Planning</td>
<td>Fall 2010</td>
<td>Catalog Descr, Course Title, Prereqs</td>
</tr>
<tr>
<td>AIS 490C</td>
<td>Strategic Planning</td>
<td>Fall 2010</td>
<td>Catalog Descr, Course Title, Prereqs</td>
</tr>
<tr>
<td>COM 382</td>
<td>The Art of Communication</td>
<td>Fall 2010</td>
<td>Catalog Descr, Course Title, Prereqs, Subject</td>
</tr>
<tr>
<td>POS 231</td>
<td>Political Science</td>
<td>Fall 2010</td>
<td>Catalog Descr, Course Title</td>
</tr>
</tbody>
</table>

- 5. AIS Minor  
  - AIS Minor  
  - Fall 2010  
  - Minor Reqmts-Course(s) Added, Minor Reqmts-Course(s) Deleted, Minor Reqmts-Unit Change  
  - Support  
  - 8 Term

### D. College of Arts and Letters - item 1- approved as presented; item 2- approved w/1 opposed; item 3- approved; item 4- removed from agenda by department; item 5 approved; item 6 approved w/1 opposed and 1 abstain.

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Approval Date</th>
<th>Notes</th>
</tr>
</thead>
<tbody>
<tr>
<td>ARH 250</td>
<td>Exploring Museums: Curiosities, Collections, and Controversies</td>
<td>Fall 2010</td>
<td>New Course</td>
</tr>
<tr>
<td>ART 315</td>
<td>Site-specific, Place-Based Installation Art</td>
<td>Fall 2011</td>
<td>New Course</td>
</tr>
<tr>
<td>MUS 410</td>
<td>Topics in Music Theory</td>
<td>Fall 2010</td>
<td>New Course</td>
</tr>
</tbody>
</table>

- 4. BSED Art Education  
  - Art Education BSED  
  - Fall 2010  
  - Major Reqmts-Unit Change  
  - Support  
  - 8 Term

- 5. BMED Music Education:  
  - BMED Music Education: Instrumental  
  - Fall 2010  
  - Major Reqmts-Course(s) Added, Major Reqmts-Course(s) Deleted, Major Reqmts-Unit Change  
  - Support  
  - BMED: Instrumental Music Support  
  - BMED Music Education: Instrumental  
  - 8 Term
E. The College of Engineering, Forestry and Natural Sciences-items 1, 3, and 5 moved to the 3/2 UCC meeting agenda; items 2 and 4 approved; item 6 tabled.
1. Is this course a Diversity or Liberal Studies Course? Liberal Studies ☐ Diversity ☐ Both ☐


3. College CFENS

4. Academic Unit/Department Biology

5. Current course subject/catalog number BIO 479

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog)

BIO 479 ECOSYSTEM ECOLOGY: CASE STUDIES ON THE COLORADO PLATEAU (3)

Principles of ecosystem ecology, including the factors controlling ecosystem structure, productivity, nutrient cycling, and energy balance-with examples from the Colorado Plateau and emphasis on global environmental change. Cross-listed with FOR 479. 2 hrs. lecture, 3 hrs. lab. Letter grade only. Course fee required. Prerequisite: (BIO 181 and BIO 182 and BIO 326) or (FOR 313 and FOR 314 and FOR 315 and FOR 316)

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

BIO 479 ECOSYSTEMS AND CLIMATE CHANGE (3)

Principles of ecosystem ecology, including the factors controlling ecosystem structure, productivity, nutrient cycling, and energy balance-with examples from the Colorado Plateau and emphasis on global environmental change. Cross-listed with FOR 479. 2 hrs. lecture, 3 hrs. lab. Letter grade only. Course fee required. Prerequisite: (BIO 181 and BIO 182 and BIO 326) or (FOR 313 and FOR 314 and FOR 315 and FOR 316)

7. Is this course required or an elective in any other plan (major, minor, certificate)? Yes ☑ No ☐

If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation? Yes ☐ No ☑

If yes, explain how in the justification and provide supporting documentation from the affected institutions.

Is the course a Common Course as defined by your Articulation Task Force? Yes ☐ No ☑

Revised 8/08
If yes, has the change been approved by the Articulation Task Force?  Yes ☐  No ☐

If this course has been listed in the Course Equivalency Guide, should that listing be left as is ☐ or be revised ☐

If revised, how should it be revised? ___________

**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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee</td>
<td>If subject or catalog number change</td>
</tr>
<tr>
<td>Current Grading Option*</td>
<td>Move ☐ or Delete ☐</td>
</tr>
<tr>
<td>Letter Grade ☐ Pass/Fail ☐ or Both ☐</td>
<td>Proposed Grading Option*</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</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list?  Liberal Studies ☐  Diversity ☐

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.  
   Change in course title only, to more accurately describe course content.

10. Approvals

   [Signature]  1/6/10
   Department Chair/Unit Head (if appropriate)/ Date

   [Signature]  2/9/10
   Chair of college curriculum committee/Date

   Dean of college/Date

Revised 8/08
For Committee use only

For University Curriculum Committee/Date

Action taken: ✓ approved as submitted ✓ approved as modified

Revised 8/08
1. Is this course a Diversity or Liberal Studies Course? Liberal Studies □ Diversity □ Both □


3. College Engineering, Forestry & Natural Sciences

4. Academic Unit/Department Electrical Engineering & Computer Science

5. Current course subject/catalog number EE 325

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog /www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm).

EE 325 ENGINEERING ANALYSIS II (3)

Analysis tools for electrical and mechanical systems with computer implementations. Typical topics include matrix and vector algebra, curve fitting, transform methods, Fourier analysis, partial differential equations, and boundary value problems. Letter grade only. Course fee required. Prerequisite: MAT 239 and (EE 222 or CS 126) and Pre- or Corequisite: CENE 225 with grades greater than or equal to C

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

EE 325 ENGINEERING ANALYSIS II (3)

Analysis tools for electrical and mechanical systems with computer implementations. Typical topics include matrix and vector algebra, curve fitting, transform methods, Fourier analysis, partial differential equations, and boundary value problems. Letter grade only. Course fee required. Prerequisite: CS 122 or CS 126 and Pre- or Corequisite: MAT 239 and CENE 225 with grades greater than or equal to C. Must have earned grades of C or better in all prerequisite courses.

7. Is this course required or an elective in any other plan (major, minor, certificate)? Yes □ No ❌ If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation? Yes □ No ❌ If yes, explain how in the justification and provide supporting documentation from the affected institutions.

Is the course a Common Course as defined by your Articulation Task Force? Yes □ No ❌ If yes, has the change been approved by the Articulation Task Force? Yes □ No □

If this course has been listed in the Course Equivalency Guide, should that listing be left as is □ or be revised □

If revised, how should it be revised? ______

Revised 8/08
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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee  yes ☐ no ☑</td>
<td>If subject or catalog number change</td>
</tr>
<tr>
<td></td>
<td>Move ☐ or Delete ☐</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</td>
</tr>
<tr>
<td>MAT 239 and (EE222 or CS126) with grades</td>
<td>CS 122 or CS 126 with grades greater than or</td>
</tr>
<tr>
<td>greater than or equal to C</td>
<td>equal to C</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>CENE 225</td>
<td>MAT 239 and CENE 225</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? Liberal Studies ☐ Diversity ☐

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.
We re-examined the requirements of EE325, and determined that we could move MAT 239 to a corequisite to allow students who had to take MAT 125 during their first semester, to still be able to stay on their 8 term plan. Without this change, students would automatically be forced into 10 terms. The other change in prerequisite lowers the level of computer programming required because programming is not central to success in this course. This will allow students in mechanical engineering to take this course without first getting a prerequisite waiver.

10. Approvals

David R Scott  2-2-2010

Department Chair/Unit Head (if appropriate)/ Date

Peggy Pollock  2/19/10

Chair of college curriculum committee/Date

Dean of college/Date

Revised 8/08
Action taken:  ✓ approved as submitted    approved as modified
1. Is this course a Diversity or Liberal Studies Course? Liberal Studies ☐ Diversity ☐ Both ☐


3. College Engineering, Forestry & Natural Sciences

4. Academic Unit/Department Electrical Engineering & Computer Science

5. Current course subject/catalog number EE 434

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm).

EE 434 WIRELESS COMMUNICATION AND NETWORKING (3)

Fundamental principles of wireless digital communication systems and networks; key properties of the wireless communication channel; building blocks of wireless networks; design and analysis of wireless ad-hoc and sensor networks. Co-convenes with EE 534. Letter grade only. Prerequisite: EE 348

7. Is this course required or an elective in any other plan (major, minor, certificate)? Yes ☐ No ☒ If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation? Yes ☐ No ☒ If yes, explain how in the justification and provide supporting documentation from the affected institutions.

If the course a Common Course as defined by your Articulation Task Force? Yes ☐ No ☒ If yes, has the change been approved by the Articulation Task Force? Yes ☐ No ☐

If this course has been listed in the Course Equivalency Guide, should that listing be left as is ☐ or be revised ☒

If revised, how should it be revised? ____

Revised 8/08
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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee</td>
<td>yes ☐ no ☐</td>
</tr>
<tr>
<td>Current Grading Option*</td>
<td>Proposed Grading Option*</td>
</tr>
<tr>
<td>Letter Grade ☐ Pass/Fail ☐ or Both ☐</td>
<td>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</td>
</tr>
<tr>
<td>EE 348</td>
<td>EE 348 with a grade greater than or equal to a C</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? Liberal Studies ☐ Diversity ☐

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.
   In order to help ensure success in this course, we don’t feel that having a ‘D’ in the prerequisite course is sufficient preparation and background.

10. Approvals

   [Signature] 2-22-10
   Department Chair/ Unit Head (if appropriate)/ Date

   [Signature] 2-20-10
   Chair of college curriculum committee/Date

   [Signature] 2-22-10
   Dean of college/Date

   For Committee use only

   [Signature] 3-2-10
   For University Curriculum Committee/Date

Action taken: ☑ approved as submitted ☑ approved as modified

Revised 8/08
1. Is this course a Diversity or Liberal Studies Course? Liberal Studies □ Diversity □ Both □


3. College Engineering, Forestry & Natural Sciences

4. Academic Unit/Department Electrical Engineering & Computer Science

5. Current course subject/catalog number EE 435

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog /www4.nau.edu/aiol/AcademicCatalog/academiccatalogs.htm).

EE 435 ERROR CORRECTING CODES
(3) Linear block codes, decoding and encoding. Hamming distance, error correction capabilities, convolutional codes, maximum-likelihood decoding and the Viterbi algorithm. Iterative decoding and design of turbo codes and low-density parity-check codes. Co-convenes with EE 535. Letter grade only. Prerequisite: EE 110 and EE 348

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

EE 435 ERROR CORRECTING CODES
(3) Linear block codes, decoding and encoding. Hamming distance, error correction capabilities, convolutional codes, maximum-likelihood decoding and the Viterbi algorithm. Iterative decoding and design of turbo codes and low-density parity-check codes. Co-convenes with EE 535. Letter grade only. Prerequisite: EE 110 and EE 348 with grades greater than or equal to a C

7. Is this course required or an elective in any other plan (major, minor, certificate)? Yes □ No √ If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation? Yes □ No √
If yes, explain how in the justification and provide supporting documentation from the affected institutions.

Is the course a Common Course as defined by your Articulation Task Force? Yes □ No √
If yes, has the change been approved by the Articulation Task Force? Yes □ No □

If this course has been listed in the Course Equivalency Guide, should that listing be left as is □ or be revised □
If revised, how should it be revised? ________

IN THE FOLLOWING SECTION, COMPLETE ONLY WHAT IS CHANGING

Revised 8/08
<table>
<thead>
<tr>
<th>CURRENT</th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current course subject/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee</td>
<td>yes □ no □</td>
</tr>
<tr>
<td>Current Grading Option*</td>
<td>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>EE 110 and EE 348</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td></td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td></td>
</tr>
<tr>
<td>Current Cross List with</td>
<td></td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? Liberal Studies □ Diversity □

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.
   In order to help ensure success in this course, we don’t feel that having a ‘D’ in either of the prerequisite courses is sufficient preparation and background.

10. Approvals

   David Scott 2-2-2010  
   Department Chair/ Unit Head (if appropriate)/ Date

   Chair of college curriculum committee/Date

   Dean of college/Date

For Committee use only

   Ron Smith 3-2-10  
   For University Curriculum Committee/Date

Action taken: □ approved as submitted □ approved as modified
# University Curriculum Committee

## Proposal for Course Change

1. Is this course a Diversity or Liberal Studies Course?  
   - Liberal Studies [ ]  
   - Diversity [ ]  
   - Both [ ]

2. Course change effective beginning of what term and year?  
   (ex. Spring 2008, Summer 2008)  
   - Fall 2010  
   - See effective dates calendar

3. College  
   - Engineering, Forestry & Natural Sciences

4. Academic Unit/Department  
   - Electrical Engineering & Computer Science

5. Current course subject/catalog number  
   - EE 476C

| 6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog)  
<table>
<thead>
<tr>
<th>www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm)</th>
</tr>
</thead>
</table>

**EE 476C PROJECT DESIGN PROCEDURES**  
(1) Proposal phase for the capstone, industry-sponsored, team design project. Proposal includes design and build documentation. Topics include teaming, sponsor negotiations, proposal writing, documentation, and computer design and management tools. 3 hrs. lab. Letter grade only. Course fee required. Prerequisite: EE 386 with grade greater than or equal to C CAP  

**EE 476C PROJECT DESIGN PROCEDURES**  
(1) Proposal phase for the capstone, industry-sponsored, team design project. Proposal includes design and build documentation. Topics include teaming, sponsor negotiations, proposal writing, documentation, and computer design and management tools. 3 hrs. lab. Letter grade only. Course fee required. Prerequisite: EE 386 or EE 386W with grade greater than or equal to C CAP

7. Is this course required or an elective in any other plan (major, minor, certificate)?  
   - Yes [ ]  
   - No [x]

   *If yes, explain and provide supporting documentation from the affected departments.*

8. Does this change affect community college articulation?  
   - Yes [ ]  
   - No [x]

   *If yes, explain how in the justification and provide supporting documentation from the affected institutions.*

9. Is the course a Common Course as defined by your Articulation Task Force?  
   - Yes [ ]  
   - No [x]

   *If yes, has the change been approved by the Articulation Task Force?*  
   - Yes [ ]  
   - No [ ]

10. If this course has been listed in the *Course Equivalency Guide,* should that listing be left as is [ ] or be revised [ ]

   *If revised, how should it be revised?*  

---

Revised 8/08
**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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee</td>
<td>yes [ ] no [ ]</td>
</tr>
<tr>
<td>Current Grading Option*</td>
<td></td>
</tr>
<tr>
<td>Letter Grade [ ] Pass/Fail [ ] or Both [ ]</td>
<td>Proposed Grading Option*</td>
</tr>
<tr>
<td>Letter Grade [ ] Pass/Fail [ ] or Both [ ]</td>
<td></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 EE 386 with grade greater than or equal to C</td>
<td>Proposed Prerequisite EE 386 or EE386W with grade greater than or equal to C</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
<tr>
<td>Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list?</td>
<td>Liberal Studies [ ] Diversity [ ]</td>
</tr>
</tbody>
</table>

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

Recently, EE 386 was changed to EE 386W. This change corrects the prerequisite to allow either EE 386 or EE 386W.

10. Approvals

David R. Scott 2-2-2010

Department Chair/ Unit Head (if appropriate)/ Date

Peggy Poltek 2/9/10

Chair of college curriculum committee/Date

Dean of college/Date

For Committee use only

Pen Gist 3/21/0

For University Curriculum Committee/Date

Action taken: [ ] approved as submitted [ ] approved as modified

Revised 8/08
## Proposal for Course Change

1. Is this course a Diversity or Liberal Studies Course?  
   Liberal Studies □  Diversity □  Both □

2. Course change effective beginning of what term and year?  
   Fall 2010

3. College  
   **Engineering, Forestry & Natural Sciences**

4. Academic Unit/Department  
   **Electrical Engineering & Computer Science**

5. Current course subject/catalog number  
   EE 483

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog  
   /www4.nau.edu/aio/AcademicCatalog/academiccatalougs.htm).  
   
   **EE 483 ANALOG AND MIXED SIGNAL CIRCUITS**  
   (3) Analysis and design of op-amps, comparators, sample and hold circuits,  
   switched capacitor circuits, dynamic analog circuits and data converters. Introduction to  
   low-voltage, low-power design techniques for mixed-signal CMOS ICs. Co-convenes w/ EE 581. Letter grade only. Prerequisite: EE 380

   **EE 483 ANALOG AND MIXED SIGNAL CIRCUITS**  
   (3) Analysis and design of op-amps, comparators, sample and hold circuits, switched capacitor circuits,  
   dynamic analog circuits and data converters. Introduction to low-voltage, low-power design techniques for mixed-signal CMOS ICs. Co-convenes w/ EE 581. Letter grade only. Prerequisite: EE 380 with a grade greater than or equal to a C

7. Is this course required or an elective in any other plan (major, minor, certificate)?  
   Yes □  No □
   If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation?  
   Yes □  No □
   If yes, explain how in the justification and provide supporting documentation from the affected institutions.

   Is the course a Common Course as defined by your Articulation Task Force?  
   Yes □  No □
   If yes, has the change been approved by the Articulation Task Force?  
   Yes □  No □

   If this course has been listed in the **Course Equivalency Guide**, should that listing  
   be left as is □  or be revised □

   If revised, how should it be revised?  ____

---

Revised 8/08
### 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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee</td>
<td>If subject or catalog number change</td>
</tr>
<tr>
<td></td>
<td>Move □ or Delete □</td>
</tr>
<tr>
<td>Current Grading Option*</td>
<td>Proposed Grading Option*</td>
</tr>
<tr>
<td>Letter Grade □ Pass/Fail □ or Both □</td>
<td>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</td>
</tr>
<tr>
<td>EE 380</td>
<td>EE 380 with a grade greater than or equal to a C</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? Liberal Studies □ Diversity □

#### 9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

In order to help ensure success in this course, we don't feel that having a ‘D’ in either of the prerequisite courses is sufficient preparation and background.

#### 10. Approvals

David K Scott 2-2-2010
Department Chair/Unit Head (if appropriate)/Date

Peggy Poll 2/9/10
Chair of college curriculum committee/Date

Dean of college/Date

For Committee use only

Ron B 3/2/10
For University Curriculum Committee/Date

Action taken: □ approved as submitted □ approved as modified

Revised 8/08
University Curriculum Committee
Proposal for Course Change

1. Is this course a Diversity or Liberal Studies Course? Liberal Studies ☐ Diversity ☐ Both ☐


   Fall 2010

3. College

   Engineering, Forestry & Natural Sciences

4. Academic Unit/Department

   Electrical Engineering & Computer Science

5. Current course subject/catalog number

   EGR 186

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog /www4.nau.edu/aiol/AcademicCatalog/academiccatalogs.htm).

   EGR 186 INTRODUCTION TO ENGINEERING DESIGN (3)

   Introduces the design process, problem-solving techniques, teaming skills, oral and written communication skills, and tools for success in academic and professional careers. Multiple hands-on projects. 2 hrs. lecture, 2 hrs. lab. Letter grade only. Course fee required.

   Prerequisite: MAT 125 or MAT 125H or higher with a grade greater than or equal to C or

   Corequisite: MAT 125 or MAT 125H or higher

   Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

   EGR 186 INTRODUCTION TO ENGINEERING DESIGN (3)

   Introduces the design process, problem-solving techniques, teaming skills, oral and written communication skills, and tools for success in academic and professional careers. Multiple hands-on projects. 2 hrs. lecture, 3 hrs. lab. Letter grade only. Course fee required. Pre- or Corequisite: MAT 125 or MAT 125H or higher with a grade greater than or equal to C or Corequisite: MAT 125 or MAT 125H or higher. Must have earned grade of C or better in prerequisite course.

7. Is this course required or an elective in any other plan (major, minor, certificate)? Yes ☐ No ☐

   If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation? Yes ☐ No ☒

   If yes, explain how in the justification and provide supporting documentation from the affected institutions.

   Is the course a Common Course as defined by your Articulation Task Force? Yes ☐ No ☐

   If yes, has the change been approved by the Articulation Task Force? Yes ☐ No ☐

   If the course has been listed in the Course Equivalency Guide, should that listing be left as is ☒ or be revised ☐

   If revised, how should it be revised?

   Revised 8/08
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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee</td>
<td>yes ☐ no ☐</td>
</tr>
<tr>
<td>If subject or catalog number change</td>
<td>Move ☐ or Delete ☐</td>
</tr>
<tr>
<td>Current Grading Option*</td>
<td>Proposed Grading Option*</td>
</tr>
<tr>
<td>Letter Grade ☐ Pass/Fail ☐ or Both ☐</td>
<td>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</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? Liberal Studies ☐ Diversity ☐

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

This course change is correcting a problem with the catalog description. The course has always been taught as 2 units lecture and 3 hours laboratory, but the catalog does not say that. This change will only clarify to match how this class has been scheduled since its inception in the late 90's. Catalog description also shortened to standard Pre- or Corequisite form.

10. Approvals

David R. Scott 2-2-2010

Department Chair/Unit Head (if appropriate)/Date

Peggy Portlet 2/9/10

Chair of college curriculum committee/Date

Dean of college/Date

 Revised 8/08
For Committee use only

For University Curriculum Committee/Date

Action taken: ✓ approved as submitted      approved as modified
University Curriculum Committee
Proposal for Course Change

1. Is this course a Diversity or Liberal Studies Course? Liberal Studies □ Diversity □ Both □


3. College Engineering, Forestry & Natural Sciences
4. Academic Unit/Department Electrical Engineering & Computer Science

5. Current course subject/catalog number EGR 186H

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog /www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm).

   EGR 186H INTRODUCTION TO ENGINEERING DESIGN (3)
   Introduces the design process, problem-solving techniques, teaming skills, oral and written communication skills, and tools for success in academic and professional careers. Multiple hands-on projects. 2 hrs. lecture, 2 hrs. lab. Letter grade only. Course fee required. Prerequisite or Corequisite: MAT 125 or MAT 125H and Honors Student Group

   Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

   EGR 186H INTRODUCTION TO ENGINEERING DESIGN (3)
   Introduces the design process, problem-solving techniques, teaming skills, oral and written communication skills, and tools for success in academic and professional careers. Multiple hands-on projects. 2 hrs. lecture, 3 hrs. lab. Letter grade only. Course fee required. Pre- or Corequisite: MAT 125 or MAT 125H or higher and Honors Student Group. Must have earned grade of C or better in prerequisite course.

7. Is this course required or an elective in any other plan (major, minor, certificate)? Yes □ No □ If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation? Yes □ No □ If yes, explain how in the justification and provide supporting documentation from the affected institutions.

   Is the course a Common Course as defined by your Articulation Task Force? Yes □ No □ If yes, has the change been approved by the Articulation Task Force? Yes □ No □ If this course has been listed in the Course Equivalency Guide, should that listing be left as is □ or be revised □

   If revised, how should it be revised? __________

Revised 8/08
IN THE FOLLOWING SECTION, COMPLETE ONLY WHAT IS CHANGING

<table>
<thead>
<tr>
<th>CURRENT</th>
<th></th>
<th>PROPOSED</th>
</tr>
</thead>
<tbody>
<tr>
<td>Current course subject/catalog number</td>
<td>Proposed course subject/catalog number</td>
<td></td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
<td></td>
</tr>
<tr>
<td>Current Course Fee</td>
<td>yes [ ] no [ ]</td>
<td>If subject or catalog number change Move [ ] or Delete [ ]</td>
</tr>
<tr>
<td>Current Grading Option*</td>
<td>Proposed Grading Option*</td>
<td></td>
</tr>
<tr>
<td>Letter Grade [ ] Pass/Fail [ ] or Both [ ]</td>
<td>Letter Grade [ ] Pass/Fail [ ] or Both [ ]</td>
<td></td>
</tr>
<tr>
<td>Current Repeat for additional Units</td>
<td>Proposed Repeat for additional Units</td>
<td></td>
</tr>
<tr>
<td>Current Max number of units</td>
<td>Proposed Max number of units</td>
<td></td>
</tr>
<tr>
<td>Current Prerequisite</td>
<td>Proposed Prerequisite</td>
<td></td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
<td></td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
<td></td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
<td></td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list?  Liberal Studies [ ] Diversity [ ]

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

   This course change is correcting a problem with the catalog description. The course has always been taught as 2 units lecture and 3 hours laboratory, but the catalog does not say that. This change will only clarify to match how this class has been scheduled since its inception in the late 90's. Catalog description also shortened to standard Pre- or Corequisite form and added "with grade greater than or equal to a C" to be consistent with EGR 186 catalog description.

10. Approvals

   David R Scott  2/2/2010
   Department Chair/ Unit Head (if appropriate)/ Date

   Peggy Pollet  2/19/10
   Chair of college curriculum committee/Date

   Dean  2/10/10
   Dean of college/Date

Revised 8/08
For University Curriculum Committee/Date

Action taken:  ✓ approved as submitted  approved as modified
1. Is this course a Diversity or Liberal Studies Course?  Liberal ☐  Diversity ☐  Both ☐


3. College  Engineering, Forestry & Natural Sciences  4. Academic Unit/Department  Electrical Engineering & Computer Science

5. Current course subject/catalog number  EGR 286

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog /www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm).

<table>
<thead>
<tr>
<th>EGR 286 ENGINEERING DESIGN: THE PROCESS  (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>The process of engineering design, mechanisms and controls, computer and programming skills, teamwork and project management, written and oral communications. Letter grade only. Course fee required. Prerequisite: EGR 186 or EGR 186H with grade greater than or equal to C and Pre- or Corequisite: EE 188 or ME 180 or CENE 180 with grade greater than or equal to C Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.</td>
</tr>
<tr>
<td>EGR 286 ENGINEERING DESIGN: THE PROCESS  (3)</td>
</tr>
<tr>
<td>The process of engineering design, mechanisms and controls, computer and programming skills, teamwork and project management, written and oral communications. Letter grade only. Course fee required. 2 hrs. lecture and 3 hrs. lab. Prerequisite: EGR 186 or EGR 186H with grade greater than or equal to C and Pre- or Corequisite: EE 188 or ME 180 or CENE 180 with grade greater than or equal to C. Must have earned grades of C or better in all prerequisite courses.</td>
</tr>
</tbody>
</table>

7. Is this course required or an elective in any other plan (major, minor, certificate)?  Yes ☒  No ☐  If yes, explain and provide supporting documentation from the affected departments.  There is no effect, since the catalog is being brought into line with how the course is scheduled.

8. Does this change affect community college articulation?  Yes ☐  No ☒  If yes, explain how in the justification and provide supporting documentation from the affected institutions.

  Is the course a Common Course as defined by your Articulation Task Force?  Yes ☐  No ☒  If yes, has the change been approved by the Articulation Task Force?  Yes ☐  No ☒

If this course has been listed in the Course Equivalency Guide, should that listing be left as is ☐ or be revised ☒

If revised, how should it be revised?  

Revised 8/08
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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee  yes ☐  no ☐</td>
<td>If subject or catalog number change Move ☐ or Delete ☐</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</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? Liberal Studies ☐ Diversity ☐

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

This course change is correcting a problem with the catalog description. The course has always been 2 units lecture and 3 hours laboratory, but the catalog does not say that. This change will only clarify to match how this class has been scheduled since its inception in the late 90's. Catalog description shortened to more concise explanation of pre- and co-requisites.

10. Approvals

David R. Scott 2-2-2010
Department Chair/ Unit Head (if appropriate)/ Date

Peggy Pollak 2/9/10
Chair of college curriculum committee/Date

Dean of college/Date

For Committee use only

For University Curriculum Committee/Date

Revised 8/08
Action taken: ☑ approved as submitted  ___________ approved as modified ___________
### University Curriculum Committee
#### Proposal for Course Change

1. Is this course a Diversity or Liberal Studies Course? [ ] Liberal Studies [ ] Diversity [ ] Both

   **Fall 2010**

3. College: **CFENS**

4. Academic Unit/Department: **Forestry**

5. Current course subject/catalog number: **FOR 479**

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog)  
   See [www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm](http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm).

   **FOR 479 ECOSYSTEM ECOLOGY (3)**
   Principles of ecosystem ecology, including the factors controlling ecosystem structure, productivity, nutrient cycling, and energy balance— with examples from the Colorado Plateau and emphasis on global environmental change. Cross-listed with BIO 479. 2 hrs. lecture, 3 hrs. lab. Letter grade only.  
   Prerequisite: (BIO 181 and BIO 182 and BIO 326) or (FOR 313 and FOR 314 and FOR 315 and FOR 316)

7. Is this course required or an elective in any other plan (major, minor, certificate)?  
   Yes [ ]  No [ ]  
   If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation?  
   Yes [ ]  No [X]  
   If yes, explain how in the justification and provide supporting documentation from the affected institutions.

   Is the course a Common Course as defined by your Articulation Task Force?  
   Yes [ ]  No [X]  
   If yes, has the change been approved by the Articulation Task Force?  
   Yes [ ]  No [ ]

---

Revised 8/08
If this course has been listed in the Course Equivalency Guide, should that listing be left as is □ or be revised □

If revised, how should it be revised? _____

### 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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee □ yes □ no □</td>
<td>If subject or catalog number change Move □ or Delete □</td>
</tr>
<tr>
<td>Current Grading Option*</td>
<td>Proposed Grading Option*</td>
</tr>
<tr>
<td>Letter Grade □ Pass/Fail □ or Both □</td>
<td>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</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? Liberal Studies □ Diversity □

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

**Change in course title only, to more accurately describe course content.**

10. Approvals

<table>
<thead>
<tr>
<th>Name</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>James A. Allen</td>
<td>9/29/09</td>
</tr>
<tr>
<td>Department Chair/Unit Head (if appropriate)/Date</td>
<td></td>
</tr>
<tr>
<td>Regina Polk</td>
<td>2/9/10</td>
</tr>
<tr>
<td>Chair of college curriculum committee/Date</td>
<td></td>
</tr>
<tr>
<td>Dean of college/Date</td>
<td></td>
</tr>
</tbody>
</table>

Revised 8/08
For Committee use only

For University Curriculum Committee/Date

Action taken: √ approved as submitted approved as modified
University Curriculum Committee
Proposal for new Academic Plan, Plan change, or Plan Deletion

<table>
<thead>
<tr>
<th>1. College</th>
<th>CEFNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Academic Unit/Department</td>
<td>BIOLOGICAL SCIENCES</td>
</tr>
<tr>
<td>3. Academic Plan Name</td>
<td>BS MICROBIOLOGY</td>
</tr>
<tr>
<td>4. Subplan (if applicable)?</td>
<td></td>
</tr>
<tr>
<td>5. Effective Date</td>
<td>FALL 2010</td>
</tr>
</tbody>
</table>

6. Is this proposal for a:
   - [ ] New Plan
   - [x] Plan Change*
   - [ ] New Subplan
   - [ ] Subplan Change
   - [ ] Plan Deletion
   - [ ] Subplan Deletion

*Plan changes must be accompanied by an updated 8 semester plan.

7. ALL Education plans, please indicate NCATE Designation:
   - [ ] Initial Plan
   - [ ] Advanced Plan
   - [ ] Remove Designation
   - [ ] Change from Initial to Advanced Plan
   - [ ] Change from Advanced to Initial Plan

8. Revised 09/07
Biology Courses
Complete the following 40 units with a grade of C or better in each course:
- BIO 181:181L and 182 (8 units)
- BIO 205 (4 units)
- BIO 305W, which meets NAU's junior writing requirement (1 unit)
- At least 2 of the following courses: BIO 340, 344, 350 (6 units)
- At least 9 additional units from the following Biology courses: BIO 340, 344, 350, 346, 369, 349L, 375, 376, 401, 409, 410, 411, 440, 471, 475, 488C.

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing and strikethrough what is being deleted.
(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)
9. For undergraduate plans, will this requirement be a student individualized plan*? X no □ yes

*A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAILS focus, for which coursework requirements are established by the student in consultation with the advisor.

If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.

10. For undergraduate plans, will a milestone** be used to:
   □ a. verify satisfactory completion of a non course requirement.
   □ b. indicate admission to a major.
   X c. will not be used.

**A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status.

If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.


   a) Students will communicate effectively in written and oral formats.
   b) Students will develop the skills necessary to collect, analyze, interpret, and present data.
   c) Students will demonstrate knowledge of basic microbiological principles.
   d) Students will have the knowledge and skills necessary to pursue careers in the field of microbiology.

12. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

   The proposed change is simply the addition of a new capstone to the list of acceptable capstones. This capstone is appropriate for our majors; we have been allowing it by exception and are now formalizing it in the catalogue.

13. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?

14. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU? No

   If so, attach supporting documentation from the affected departments/units and college dean.

Revised 09/07
15. Will present library holdings support this academic plan/subplan?

Yes

Certifications

Department Chair/Unit Head (if appropriate)

M. Watwood

Date: 1/25/10

Chair of college curriculum committee

Date: 2/12/10

Dean of college

Date: 2/8/10

For committee use only

For University Curriculum Committee

Action taken: ✔ approved as submitted  ☐ approved as modified

Date: 3/12/10

Revised 09/07
University Curriculum Committee
Proposal for new Academic Plan, Plan change, or Plan Deletion

<table>
<thead>
<tr>
<th>1. College</th>
<th>CEFNS</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Academic Unit/Department</td>
<td>CECMENE</td>
</tr>
<tr>
<td>3. Academic Plan Name</td>
<td>Minor Construction Management</td>
</tr>
<tr>
<td>4. Subplan (if applicable)?</td>
<td></td>
</tr>
<tr>
<td>5. Effective Date</td>
<td>FALL 2010</td>
</tr>
<tr>
<td>6. Is this proposal for a:</td>
<td>☐ New Plan  X Plan Change*  ☐ Plan Deletion</td>
</tr>
<tr>
<td></td>
<td>☐ New Subplan  ☐ Subplan Change</td>
</tr>
<tr>
<td></td>
<td>☐ Subplan Deletion</td>
</tr>
</tbody>
</table>

*Plan changes must be accompanied by an updated 8 semester plan.

7. ALL Education plans, please indicate NCATE Designation:

☐ Initial Plan  ☐ Advanced Plan  ☐ Remove Designation

☐ Change from Initial to Advanced Plan  ☐ Change from Advanced to Initial Plan

8.
For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current online academic catalog: [http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm](http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm)

Be sure you include all catalog text that pertains to this plan change.

For New Plans, leave this column blank.

Minor Construction Management

To complete this minor, you take the following 24-25 units, with a grade of C or better in each course:

- CM 120, 329, and 388 (9 units)
- CM 360 or CENE 383 (3-4 units)
- CM 391, 460, 481, and 489 (12 units)

Be aware that some of the courses required for your minor may have prerequisites that you must also take. Check the courses in the appropriate subject.

Contact the Construction Management department to be assigned a minor advisor.

Click here for more information about Construction Management courses, Project Management courses, and faculty.

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

(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

Minor Construction Management: Management

To complete this minor, you take the following 24-25 units, with a grade of C or better in each course:

- CM 120, 329, and 388 (9 units)
- CM 360 or CENE 383 (3-4 units)
- CM 391, 460, 481, and 489 (12 units)
- CM 124, 222, 224, 329, 388, 481, 489, and 491 (24 units)

Be aware that some of the courses required for your minor may have prerequisites that you must also take. Check the courses in the appropriate subject.

Contact the Construction Management department to be assigned a minor advisor.

Click here for more information about Construction Management courses, Project Management courses, and faculty.

9. For undergraduate plans, will this requirement be a student individualized plan*? X no □ yes

*Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAIS focus, for which coursework requirements are established by the student in consultation with the advisor.

If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.

10. For undergraduate plans, will a milestone** be used to:

□ a. verify satisfactory completion of a non course requirement.
□ b. indicate admission to a major.
X c. will not be used.

**A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status.

If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.

11. Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage - [http://www4.nau.edu/assessment/main/degree/degree.htm](http://www4.nau.edu/assessment/main/degree/degree.htm)).

Revised 09/07
Students will demonstrate:

- Skill in oral communications
- Skill in written communications
- Knowledge of methods, materials, and plan reading
- Knowledge of and skill with use of engineering principles including:
  - Engineering concepts
  - Surveying and project layout
- Knowledge and skill with the technical and professional principles of construction management including:
  - Management concepts
  - Bidding and estimating
  - Budgeting, costs, and cost controls
  - Planning, scheduling, and control
  - Construction safety
  - Project administration
- Knowledge of the ethical principles that guide the construction industry

12. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

   A review of the Minor in Construction Management found that the plan contained outdated courses and information. In addition, the plan was designed around civil engineering while in fact many of the most successful students in the Minor were coming from Interior Design and Business. The proposed changes will correct the outdated information (i.e. courses that are no longer offered) and provide for a minor that has broader applicability to students from other academic disciplines.

13. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?
   Not Applicable

14. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU?
   If so, attach supporting documentation from the affected departments/units and college dean.
   Not Applicable

15. Will present library holdings support this academic plan/subplan?
   Not Applicable

Certifications

[Signatures and dates]

Revised 09/07
University Curriculum Committee
Proposal for Course Change

1. Is this course a Diversity or Liberal Studies Course?
   - Liberal Studies: □
   - Diversity: □
   - Both: □

2. Course change effective beginning of what term and year?
   (ex. Spring 2008, Summer 2008) See effective dates calendar
   - Fall 2010

3. College: SBS
4. Academic Unit/Department: SSW

5. Current course subject/catalog number: SW 420

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog /www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm).

   **SW 420 WELFARE POLICY ANALYSIS AND PLANNING (3)**

   Examines current welfare structures, including public, private, and voluntary programs. Discussion of various social welfare policy analysis and planning frameworks. **Examination of current social welfare policies and social welfare policy analysis and practice frameworks.** Prerequisite: SW 320W or International Exchange Student Group

   Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.

7. Is this course required or an elective in any other plan (major, minor, certificate)?
   - Yes: □
   - No: X □
   If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation?
   - Yes: □
   - No: X □
   If yes, explain how in the justification and provide supporting documentation from the affected institutions.

   Is the course a Common Course as defined by your Articulation Task Force?
   - Yes: □
   - No: X □
   If yes, has the change been approved by the Articulation Task Force?
   - Yes: □
   - No: □

Revised R/8
If this course has been listed in the Course Equivalency Guide, should that listing be left as is X □ or be revised

If revised, how should it be revised? ______

**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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
<tr>
<td>Current Course Fee yes □ no □</td>
<td>If subject or catalog number change Move □ or Delete □</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</td>
</tr>
<tr>
<td>Current Co-requisite</td>
<td>Proposed Co-requisite</td>
</tr>
<tr>
<td>Current Co-Convene with</td>
<td>Proposed Co-Convene with</td>
</tr>
<tr>
<td>Current Cross List with</td>
<td>Proposed Cross List with</td>
</tr>
</tbody>
</table>

Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? Liberal Studies □ Diversity □

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

The proposed course title and catalog description reflects the realignment of the course with our new social work program mission, goals, and competences.

**10. Approvals**

Department Chair/ Unit Head (if appropriate)/ Date

Chair of college curriculum committee/Date 2/5/10

Dean of college/Date

For Committee use only

UCC Approval

Revised R/MR
University Curriculum Committee
Proposal for new Academic Plan, Plan change, or Plan Deletion

<table>
<thead>
<tr>
<th>1. College</th>
<th>Social and Behavioral Sciences</th>
</tr>
</thead>
</table>

| 3. Academic Plan Name | Environmental Communication Minor |

| 4. Subplan (if applicable)? |

| 5. Effective Date | FALL 2010 | Revised from new to change 2/10/10 |

<table>
<thead>
<tr>
<th>6. Is this proposal for a:</th>
<th>☑ New Plan</th>
<th>☑ Plan Change*</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>☐ New Subplan</td>
<td>☐ Subplan Change</td>
</tr>
<tr>
<td></td>
<td>☐ Plan Deletion</td>
<td>☐ Subplan Deletion</td>
</tr>
</tbody>
</table>

*Plan changes must be accompanied by an updated 8 semester plan.

7. For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current online academic catalog: [http://www4.nau.edu/ao/AcademicCatalog/academiccatalogs.htm](http://www4.nau.edu/ao/AcademicCatalog/academiccatalogs.htm)

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

(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

The minor in environmental communication is designed to provide students with knowledge and skills related to environmental journalism; environmental advocacy; environmental decision-making, collaboration, and conflict resolution; rhetorics of environmentalism; and representations of nature.

To complete this minor, you take the following 27 credits:

- COM 150 and 250 (6 credits)
- SC 370 (3 credits)
- JLS 335W (3 credits)
- 9 credits from the following:
  - SC 217, SC 300W, SC 311, SC 361, SC 365, SC 460, SC 475, SC 472, SC 477
  - PR 272

Be aware that some of the courses required for your minor may have prerequisites that you must also take. Check the courses in the
appropriate subject:  the appropriate subject:

8. For undergraduate plans, will this requirement be a student individualized plan*? [ ] no  [ ] yes
   *A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAlS focus, for which coursework requirements are established by the student in consultation with the advisor. If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.

9. For undergraduate plans, will a milestone** be used to:
   [ ] a. verify satisfactory completion of a non course requirement.
   [ ] b. indicate admission to a major.
   [X] c. will not be used.
   **A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status.

If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.

   --To gain a broad understanding of western environmental history, policy and ethics, and, specifically, how this information is articulated in various popular communication mediums.
   --To think critically about environmental messages pertaining to human relationships with the natural world that are communicated through literature, music, film and other journalistic venues both electronic and print.
   --To develop research and writing skills in the area of environmental communication.
   --To have working knowledge of community and grassroots activism and how organizations function in relation to environmental campaigns and causes.

11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

We have removed the Environmental Communication emphasis from the new converged Journalism Plan. The minor in Environmental Communication is its replacement.

12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?  No.

13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU?  No.

14. Will present library holdings support this academic plan/subplan?  Yes.

Certifications

Department Chair/ Unit Head (if appropriate)  
[Signature]  Date 2/12/10

Chair of college curriculum committee  
[Signature]  Date

Dean of college  

Date

Revised 09/07
For committee use only

For University Curriculum Committee

Action taken:  

Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.
### University Curriculum Committee
Proposal for New Academic Plan, Plan Change, or Plan Deletion

<table>
<thead>
<tr>
<th>1. College</th>
<th>Social and Behavioral Sciences</th>
</tr>
</thead>
<tbody>
<tr>
<td>2. Academic Unit/Department</td>
<td>School of Communication</td>
</tr>
<tr>
<td>3. Academic Name</td>
<td>Environmental Communication Minor</td>
</tr>
<tr>
<td>4. Subplan (if applicable)?</td>
<td></td>
</tr>
<tr>
<td>5. Effective Date</td>
<td>FALL 2010</td>
</tr>
<tr>
<td>6. Is this proposal for a:</td>
<td>□ New Plan</td>
</tr>
<tr>
<td></td>
<td>□ Plan Change*</td>
</tr>
<tr>
<td></td>
<td>□ Plan Deletion</td>
</tr>
<tr>
<td></td>
<td>□ New Subplan</td>
</tr>
<tr>
<td></td>
<td>□ Subplan Change</td>
</tr>
<tr>
<td></td>
<td>□ Subplan Deletion</td>
</tr>
</tbody>
</table>

*Plan changes must be accompanied by an updated 8 semester plan.

---

**For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current online academic catalog:**

([http://www4.nau.edu/alo/AcademicCatalog/academiccatalogs.htm](http://www4.nau.edu/alo/AcademicCatalog/academiccatalogs.htm))

*Be sure you include all catalog text that pertains to this plan change*

---

**Show the proposed changes in this column.**

Please BOLD the changes, to differentiate from what is not changing and strikethrough what is being deleted.

*(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)*

The minor in environmental communication is designed to provide students with knowledge and skills related to environmental journalism; environmental advocacy; environmental decision-making, collaboration, and conflict resolution; rhetorics of environmentalism; and representations of nature.

To complete this minor, you take 21 units.

18 units:
- COM 150 and 250 (6 units)
- SC 366 (3 units)
- JLS 335W (3 units)

9 units from:
- SC 217, 300W, 311, 361, 365, 460, 472, 475, 477, PR 272

---

**8. For undergraduate plans, will this requirement be a student individualized plan?**

□ no □ yes

*A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAILS focus, for which coursework requirements are established by the student in consultation with the advisor.

If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.

Revised 09/07
9. For undergraduate plans, will a milestone** be used to:
   - [ ] a. verify satisfactory completion of a non course requirement.
   - [ ] b. indicate admission to a major.
   - [X] c. will not be used.

**A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status.

If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.


   --To gain a broad understanding of western environmental history, policy and ethics, and, specifically, how this information is articulated in various popular communication mediums.
   --To think critically about environmental messages pertaining to human relationships with the natural world that are communicated through literature, music, film and other journalistic venues both electronic and print.
   --To develop research and writing skills in the area of environmental communication.
   --To have working knowledge of community and grassroots activism and how organizations function in relation to environmental campaigns and causes.

11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

   We have removed the Environmental Communication emphasis from the new converged Journalism Plan. The minor in Environmental Communication is its replacement.

12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?
   
   No.

13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU?   No.

14. Will present library holdings support this academic plan/subplan?

   Yes.

Certifications

[Signature]

Department Chair/Unit Head (if applicable) Date

[Signature]

Chair of college curriculum committee Date

[Signature]

Dean of college Date

For committee use only

For University Curriculum Committee Date

Action taken: [ ] approved as submitted [ ] approved as modified

Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.

Revised 09/07
2/2/10

Effective Fall 2010

FOR 254 –delete this course from the LS program
ARH 344 –change the block from CU to AHI

2-10-10

Hi Nicole,

One more thing. I just learned that, although we will retain EDF 301W as a Jr. Level Writing course, we are going to delete the SPW LS Distribution Block designation.

Thanks,
Shelly

[Signature]

UCC Approval
University Curriculum Committee
Proposal for new Academic Plan, Plan change, or Plan Deletion

1. College  CHHS

2. Academic Unit/Department  Health Sciences
   Allied Health
   Diagnostic Medical
   Imaging Technology
   Medical Assisting
   Paramedic Care
   Physical Therapist
   Assisting
   Respiratory Care
   Surgical Technology

3. Academic Plan Name

4. Subplan (if applicable)?

   BS Health Sciences:

5. Effective Date  FALL 2010

6. Is this proposal for a:  
   ☐ New Plan  ☐ Plan Change*  ☐ Plan Deletion
   ☐ New Subplan  ☒ Subplan Change  ☐ Subplan Deletion

   *Plan changes must be accompanied by an updated 8 semester plan.

   No change to 8 semester plan

7.

Revised 09/07
For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current online academic catalog: (http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm)
Be sure you include all catalog text that pertains to this plan change

Show the proposed changes in this column.
Please BOLD the changes, to differentiate from what is not changing and strikethrough what is being deleted.
(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

**B.S. HEALTH SCIENCES: DIAGNOSTIC MEDICAL IMAGING AND THERAPY (EXTENDED MAJOR)**

To be eligible for this academic plan, students must be admitted to, enrolled in, or be graduates from an associate degree program at a regionally accredited community college or university in diagnostic medical imaging and therapy.

To earn this degree, you must complete at least **122** units of coursework, which we describe in the sections that follow:
- at least **35** units of liberal studies requirements. Be aware that you may not use courses with an HS prefix to satisfy these liberal studies requirements
- at least **87** units of major requirements
- elective courses, if needed, to reach an overall total of at least 120 units

Be aware that some courses required for your degree may have prerequisites that you must also take. Check NAU's course catalog to find out. (You may be able to count these prerequisites toward your liberal studies or general elective credit.)

Please note that you must complete NAU's diversity requirements by taking two 3-unit courses, one in U.S. ethnic diversity and one in global diversity.

**B.S. HEALTH SCIENCES: DIAGNOSTIC MEDICAL IMAGING AND THERAPY (EXTENDED MAJOR)**

To be eligible for this academic plan, students must be admitted to, enrolled in, or be graduates from an associate degree program at a regionally accredited community college or university in diagnostic medical imaging and therapy.

To earn this degree, you must complete at least **120** units of coursework, which we describe in the sections that follow:
- at least **35** units of liberal studies requirements. Be aware that you may not use courses with an HS prefix to satisfy these liberal studies requirements
- at least **85** units of major requirements
- elective courses, if needed, to reach an overall total of at least 120 units

Be aware that some courses required for your degree may have prerequisites that you must also take. Check NAU's course catalog to find out. (You may be able to count these prerequisites toward your liberal studies or general elective credit.)

Please note that you must complete NAU's diversity requirements by taking two 3-unit courses, one in U.S. ethnic diversity and
awareness. These courses may be used to meet other requirements within your academic plan if you choose them carefully. Click here for a list of the available diversity courses.

Finally, please note that you may be able to use some courses to meet more than one requirement; however, you must still meet the total of at least 120 units to graduate. Contact your advisor for details.

**MAJOR REQUIREMENTS**

You take 87 units, which include a common health sciences core for all six allied health majors (subplans) and distinct specialization requirements for each. Please note that you must have a grade of C or better for all of your major courses.

The 27 units of health sciences core courses include:

- HS 200, 300, 301, 404, and 410 (15 units)
- HHS 300W, which meets NAU’s junior writing requirement (3 units)
- HS 408C, which meets NAU’s senior capstone requirement (3 units)
- 6 units from any other Health Sciences courses

In addition, you take 60 units of specialization requirements as a block of courses from an associate degree program at a regionally accredited community college or university in diagnostic medical imaging and therapy. This block includes courses that meet the requirements for graduation and for national certification or licensure in the discipline.

**GENERAL ELECTIVES**

one in global diversity awareness. These courses may be used to meet other requirements within your academic plan if you choose them carefully. Click here for a list of the available diversity courses.

Finally, please note that you may be able to use some courses to meet more than one requirement; however, you must still meet the total of at least 120 units to graduate. Contact your advisor for details.

**MAJOR REQUIREMENTS**

You take 85 units, which include a common health sciences core for all seven allied health majors (subplans) and distinct specialization requirements for each. Please note that you must have a grade of C or better for all of your major courses.

The 27 units of health sciences core courses include:

- HS 200, 300, 301, 404, and 410 (15 units)
- HHS 300W, which meets NAU’s junior writing requirement (3 units)
- HS 408C, which meets NAU’s senior capstone requirement (3 units)
- 6 units from any other Health Sciences courses

In addition, you take up to 58 units of specialization requirements as a block of courses from an associate degree program at a regionally accredited community college or university in diagnostic medical imaging and therapy. This block includes courses that meet the requirements for graduation and for national certification or licensure in the discipline.

**GENERAL ELECTIVES**

Additional coursework must be taken if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit.
Additional coursework must be taken if, after you have met the previously described requirements, you have not yet completed a total of 120 units of credit.
8. For undergraduate plans, will this requirement be a student individualized plan? ☑ no ☐ yes
   *A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAILS focus, for which coursework requirements are established by the student in consultation with the advisor.
   If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.

9. For undergraduate plans, will a milestone** be used to:
   a. verify satisfactory completion of a non course requirement.
   ☑ b. indicate admission to a major.
   ☐ c. will not be used.
   **A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status.
   If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.

10. Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage -

   Proposed changes reflect renumbering of HS courses; however, plan learning outcomes have not changed.

11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

   These changes are necessary due to a separate proposal renumbering HS 333 to HS 404. This change also corrects an error in the catalog that lists HS 200, 301, 333, and 410 as 9 units when they actually reflect 12 units of coursework. Finally, HS 300, a prerequisite to other courses in this subplan, was moved up to be a “required” course in this subplan to more clearly describe program requirements. It currently is a hidden requirement.

12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?
   No new resources will be required.

13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU?
   If so, attach supporting documentation from the affected departments/units and college dean.
   This plan will not affect other majors, plans or subplans.

14. Will present library holdings support this academic plan/subplan?
   No changes to necessary library holdings.

Certifications

[Signature] 3/1/10

Department Chair/Unit Head (if appropriate)

[Signature] 3/1/10

Revised 09/07
Chair of college curriculum committee

Dean of college

For committee use only

For University Curriculum Committee

Action taken: ___ approved as submitted ___ approved as modified

Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.

Revised 09/07
University Curriculum Committee
Proposal for New Course

1. Is this course being proposed for Liberal Studies designation?  Yes □  No □
   If yes, route completed form to Liberal Studies.


3. College  CEFNS  4. Academic Unit /Department  BIOLOGY

5. Course subject/catalog number  BIO 484  6. Units/Credit Hours  4 (3 hours lecture, 3 hours lab)

7. Long course title  BIOMEDICAL HISTOLOGY  (max 100 characters including spaces)

8. Short course title (max. 30 characters including spaces)  BIOMEDICAL HISTOLOGY

9. Catalog course description (max. 30 words, excluding requisites).
   INVESTIGATION OF THE MICROANATOMY, FUNCTION, AND THE STRUCTURAL BASIS OF PHYSIOLOGY OF HUMAN CELLS, TISSUES, AND ORGANS IN A COMBINED LECTURE AND LABORATORY.

10. Grading option:
    Letter grade  ☒  Pass/Fail □  or Both □
    (If both, the course may only be offered one way for each respective section.)

11. Co-convened with
    11a. Date approved by UGC
    (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented)

12. Cross-listed with
    (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)

13. May course be repeated for additional units? yes □  no ☒
    a. If yes, maximum units allowed?
    b. If yes, may course be repeated for additional units in the same term? yes □  no □
    (ex. PES 100)

14. Prerequisites (must be completed before proposed course)
    BIO 201, 202 with grades of B or better.

15. Corequisites (must be completed with proposed course)

16. Is the course needed for a new or existing plan of study (major, minor, certificate)?
    yes □  no ☒

revised 8/08
Name of plan?

Note: If required, a new plan or plan change form must be submitted with this request.

17. Is a potential equivalent course offered at a community college (lower division only) yes X  
   If yes, does it require listing in the Course Equivalency Guide? yes X  
   Please list, if known, the institution and subject/catalog number of the course

18. Names of current faculty qualified to teach this course: DAVID ABLE, KERRY HENRICKSON, LON OWEN, DAVID PIEROTTI

19. Justification for new course, including unique features if applicable. (Attach proposed syllabus in the approved university format).

   A ROBUST PREMEDICAL PROGRAM WOULD BE ABLE TO PREPARE STUDENTS FOR THEIR GRADUATE/PROFESSIONAL COURSEWORK. THIS COURSE WILL COMPLIMENT OUR OFFERINGS IN GROSS ANATOMY, PHYSIOLOGY, AND PATHOLOGY BY PROVIDING STUDENTS WITH EXPERIENCE IN IDENTIFYING CELLS, TISSUES, AND ORGANS, AND AN UNDERSTANDING OF THE STRUCTURAL BASES OF PHYSIOLOGY

For Official AIO Use Only:
Component Type  
Consent  
Topics Course  

35. Approvals

[Signatures and dates]

For Committees use only

[Signature and date]

For University Curriculum Committee

[Signature and date]

Action taken: Approved as submitted

revised 8/08
General Information
- College of Forestry, Engineering and Natural Sciences
- BIO 484, Biomedical Histology
- Offered in spring semesters
- 9:00 - 12:00
- Instructor: Dr. David Able
- Office: Biology 428
- After class and by appointment

Course prerequisites: BIO 201, 202 with grades of A or B.

Course description: An investigation of the microanatomy, function, and the structural basis of physiology of human cells, tissues, and organs. Lecture and lab meet concurrently.

Student Learning Expectations/Outcomes for this Course Objectives: To provide the student with 1) the basis for recognizing characteristic microanatomical structures of cells, tissues, and organs of the human body, 2) the ability to associate these structures with their functional significance. 3) a basic understanding of the structure and use of a light microscope, although most materials will be viewed on computer monitors. Specific objectives for each topic are listed in the Laboratory Guide. All purchasers of the textbook will have access to all histological specimens online.

Course structure/approach: This is a systems-based course in biomedical histology. Lecture and labs meet concurrently in the Biology Computer Lab (Biology room 413). Each class meeting consists of an introduction to the cellular and molecular structure and the function of the cells, tissues, and organs in a particular body system. Afterward, students use virtual microscopy, light microscopy, and printed atlases to familiarize themselves with microanatomical structures.

Textbook and required materials
   A great introduction to histology and cell biology with good schematic illustrations and micrographs.
   The standard atlas of histology.
   This laboratory guide was written by my undergraduate mentor, and is used with permission. Bring it to all class meetings: it guides you through the materials, and refers to illustrations and micrographs in Wheater.

Recommended optional materials/references (attach reading list)
None.
### Course Outline

<table>
<thead>
<tr>
<th>Date</th>
<th>Topic of Lecture and Lab</th>
<th>Kierszenbaum pages</th>
<th>Wheate Chapters</th>
</tr>
</thead>
<tbody>
<tr>
<td>T 1/12</td>
<td>Intro; epithelial and cell junctions 1</td>
<td>1-23</td>
<td>5</td>
</tr>
<tr>
<td>R 1/14</td>
<td>Epithelia and cell junctions 2</td>
<td>1-23</td>
<td>5</td>
</tr>
<tr>
<td>T 1/19</td>
<td>Cytoskeleton, nucleus and cell cycle</td>
<td>23-50</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>R 1/21</td>
<td>Secretion, membranes; organelles</td>
<td>Chapter 2</td>
<td>1 &amp; 2</td>
</tr>
<tr>
<td>T 1/26</td>
<td>Cell signalling, stem cells, cell death</td>
<td>Chapter 3</td>
<td>2</td>
</tr>
<tr>
<td>R 1/28</td>
<td>Connective tissues</td>
<td>95-113</td>
<td>4</td>
</tr>
<tr>
<td>T 2/2</td>
<td>Cartilage and bone</td>
<td>113-130</td>
<td>10</td>
</tr>
<tr>
<td>R 2/4</td>
<td>Bone formation and joints</td>
<td>Chapter 5</td>
<td>10</td>
</tr>
<tr>
<td>T 2/9</td>
<td>Blood cells and hematopoiesis</td>
<td>Chapter 6</td>
<td>3</td>
</tr>
<tr>
<td>R 2/11</td>
<td>Muscle</td>
<td>Chapter 7</td>
<td>6</td>
</tr>
<tr>
<td>T 2/16</td>
<td>First lecture and lab exams</td>
<td>Chapter 8</td>
<td>7</td>
</tr>
<tr>
<td>R 2/18</td>
<td>Nervous tissue</td>
<td>Chapter 9</td>
<td>7, 20, 2</td>
</tr>
<tr>
<td>T 2/23</td>
<td>Sensory organs (eye and ear)</td>
<td>265-286</td>
<td>11</td>
</tr>
<tr>
<td>R 2/25</td>
<td>Immune-lymphatic system 1</td>
<td>286-298</td>
<td>11</td>
</tr>
<tr>
<td>T 3/2</td>
<td>Immune-lymphatic system 2</td>
<td>Chapter 11</td>
<td>9</td>
</tr>
<tr>
<td>R 3/4</td>
<td>Integumentary system</td>
<td>Chapter 12</td>
<td>8</td>
</tr>
<tr>
<td>T 3/9</td>
<td>Cardiovascular system</td>
<td>Chapter 13</td>
<td>12</td>
</tr>
<tr>
<td>R 3/11</td>
<td>Respiratory system</td>
<td>Chapter 14</td>
<td>16</td>
</tr>
<tr>
<td>T 3/23</td>
<td>Second lecture and lab exams</td>
<td>Chapter 15</td>
<td>13 &amp; 14</td>
</tr>
<tr>
<td>R 3/25</td>
<td>Urinary system</td>
<td>Chapter 16</td>
<td>14</td>
</tr>
<tr>
<td>T 3/30</td>
<td>Upper digestive system</td>
<td>Chapter 17</td>
<td>15</td>
</tr>
<tr>
<td>R 4/1</td>
<td>Lower digestive system</td>
<td>Chapter 18</td>
<td>17</td>
</tr>
<tr>
<td>T 4/6</td>
<td>Digestive glands</td>
<td>Chapter 19</td>
<td>17</td>
</tr>
<tr>
<td>R 4/8</td>
<td>Neuroendocrine system</td>
<td>Chapter 20, 21</td>
<td>18</td>
</tr>
<tr>
<td>T 4/13</td>
<td>Endocrine system</td>
<td>Chapter 22</td>
<td>19</td>
</tr>
<tr>
<td>R 4/15</td>
<td>Male reproductive system</td>
<td>Chapter 23</td>
<td>19</td>
</tr>
<tr>
<td>T 4/20</td>
<td>Female reproductive system 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R 4/22</td>
<td>Female reproductive system 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>T 4/27</td>
<td>Review</td>
<td></td>
<td></td>
</tr>
<tr>
<td>R 4/29</td>
<td>FINAL LECTURE AND LAB EXAMS</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

### Assessment of Student Learning Outcomes
- **Methods of Assessment:** Students are assessed based on their scores on lecture exams and laboratory practical exams.
- **Timeline for Assessment:**

### Grading System
There are 3 preliminary lecture exams, one cumulative final lecture exam, and 3 laboratory exams in this course. Each is worth 100 points. There are 700 points possible in this course. The grade cutoffs are: A: 90% and above; B: 80% and above; C: 70% and above; D 60% and above; F: < 60%.

### Course policy
- Make-up tests are arranged in accordance with University policy.
- Attendance is required.

revised 8/08
• Statement on plagiarism and cheating. See:
  http://www2.nau.edu/academicadmin/UCCPolicy/plystmt.html.
University Curriculum Committee
Proposal for Course Change

1. Is this course a Diversity or Liberal Studies Course? Liberal Studies ☐ Diversity ☐ Both ☐


3. College CEFNS

4. Academic Unit/Department Biology

5. Current course subject/catalog number BIO426C Plant Physiology

6. Current catalog title, course description and units. (Cut and paste from current on-line academic catalog /www4.nau.edu/aio/AcademicCatalog/academiccatalo...)
BIO 426C Plant Physiology 3CH
Analyzes plant functions, including their systems, cellular mechanisms, and integration. Recommended: CHM 360. Prerequisite: BIO 344 and (CHM 152 or CHM 230) and (BIO 284 or BIO 345 or BIO 374 or BIO 410 or BIO 411 or BIO 414 or BIO 426C or BIO 431) CAP

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.
BIO 426C Plants and Climate (3)
Analyzes plant physiological functions, including photosynthesis, transpiration, respiration, and energy balance, and interactions with the past and current climate system. 3 hours lecture. Recommended: CHM 360, BIO284. Prerequisite: BIO181 and Senior Status

7. Is this course required or an elective in any other plan (major, minor, certificate)? Yes ☐ No ☑ If yes, explain and provide supporting documentation from the affected departments.

8. Does this change affect community college articulation? Yes ☐ No ☑ If yes, explain how in the justification and provide supporting documentation from the affected institutions.

Is the course a Common Course as defined by your Articulation Task Force? Yes ☐ No ☑ If yes, has the change been approved by the Articulation Task Force? Yes ☐ No ☐
If this course has been listed in the Course Equivalency Guide, should that listing be left as is ☐ or be revised ☐
If revised, how should it be revised? ☐

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/catalog number</td>
<td>Proposed course subject/catalog number</td>
</tr>
<tr>
<td>Current number of units/credits</td>
<td>Proposed number of units/credits</td>
</tr>
</tbody>
</table>

Revised 8/08
| Current Course Fee | yes □ no □ | If subject or catalog number change
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Move □ or Delete □</td>
</tr>
</tbody>
</table>
| Current Grading Option* | Letter Grade □ Pass/Fail □ or Both □ | Proposed Grading Option*
|                   |             | Letter Grade □ Pass/Fail □ or Both □ |
| Current Repeat for additional Units | Proposed Repeat for additional Units |
| Current Max number of units | Proposed Max number of units |
| Current Prerequisite BIO344 and (CHM 152 or CHM 230) and (BIO 284 or BIO 345 or BIO 374 or BIO 410 or BIO 411 or BIO 414 or BIO 426C or BIO 431) | Proposed Prerequisite BIO181 and Senior Status |
| Current Co-requisite | Proposed Co-requisite |
| Current Co-Convene with | Proposed Co-Convene with |
| Current Cross List with | Proposed Cross List with |
| Do you want to remove this course from either the Liberal Studies Course list and or the Diversity Course list? | Liberal Studies □ Diversity □ |

9. Justification for course change. Please indicate how past assessments of student learning prompted proposed changes.

**Course change request is based on perception that students need the opportunity to make a clearer connection of plant physiology to higher-level disciplines including ecosystem and climate science. Students would benefit by better understanding how plants and the climate system have co-evolved and how current climate change both impacts and is affected by physiological processes of wild and cultivated plants. This change in perspective of the course will better prepare students for jobs in private sector and land management agencies that increasingly need to address issues of climate change. The prerequisites have been simplified in order to make the course available to students in a broader range of disciplines. This course will remain a capstone course for the Biology Department.**

10. Approvals

Department Chair/ Unit Head (if appropriate)/ Date

Chair of college curriculum committee/Date

Dean of college/Date

For Committee use only

For University Curriculum Committee/Date

Action taken: approved as submitted

Approved as modified
19 January 2010
College of Engineering, Forestry and Natural Sciences
Curriculum Committee

Dear Committee Members:

Attached please find the course change form and revised syllabus for my proposed
course, Plants and Climate, a modification of my existing course, Plant Physiology,
BIO426.

Sincerely,

George W. Koch
Professor of Biological Sciences

cc: Biology Curriculum Committee (Peggy Pollak)
College of Engineering, Forestry and Natural Sciences
PLANT AND CLIMATE, BIO426C, Course No. XXXX
Spring XXXX, 3 Credits Hours

Days & Hours
M, W 11:30 - 12:45 Rm. 234 Biology, Bldg. 21

Instructor
Dr. George Koch
Room 243 Biology. Office hours: M, W 9:00 - 10:00 am & by appointment.
Tel: 523-7150, email george.koch@nau.edu.

Prerequisites
See undergraduate catalog for the prerequisites.

Overview
This course focuses on the physiology of higher plants and the way the evolution and distribution of plant life on Earth interacts with the Earth’s climate system. The course emphasizes an understanding of physiology, the branch of biology dealing with the vital functions of living organisms and practiced by studying processes at different levels of organization, from the organelle to the whole organism. This course emphasizes basic physical and chemical principles that underlie the interaction of organisms, specifically plants, with their physical and biological environments. We will frequently use quantitative approaches, generally involving no more than algebra.

The physiological content of the course will be directed to understanding the interactions of plants with the Earth’s climate system. For example, students will develop their understanding of plant physiology by addressing questions such as: When did photosynthesis first arise and how did the spread of photosynthetic organisms affect the oxygen and carbon dioxide composition of Earth’s early atmosphere? How is the current distribution of different types of plants determined by the diversity of physiological tolerances of drought, temperature extremes, and light levels? What are the physiological controls on transpiration by Earth’s vegetation and how does transpiration influence local and regional climate? What is the biophysical basis for using satellite remote sensing to estimate the rate of photosynthesis by large areas of forests, woodlands, or grasslands? How do scientists who model the Earth’s climate system, and its expected change due to anthropogenic greenhouse gas emissions, account for the feedbacks between plants and that changing climate?

In terms of specific content areas, the course will focus on three fundamental physical challenges faced by all plants (and all organisms of any kind) at some point in their life cycles: maintaining proper hydration (“water relations”), exchanging gases with their surroundings (“gas exchange”), and dealing with energy exchange with their surroundings (“energy balance”). This course is designed to build an understanding of the physical principles underlying these processes.

Course Objectives
• To introduce the basic principles underlying plant water relations, gas exchange, and energy balance
• To develop an understanding of the key role that terrestrial vegetation plays in Earth’s climate system through the exchange of key gases (carbon dioxide, water vapor, hydrocarbons) and through biophysical interactions that influence surface energy balance.
• To develop skills in applying physical principles and quantitative approaches to problems in biology.
• To gain experience in reading scientific literature and in expressing your understanding of scientific information orally and in writing.
Reading to support lecture material
A variety of reading materials will support the material presented in lectures, which will be your primary source of information. All students will be expected to acquire and read The Emerald Planet: How Plants Changed Earth’s History by David Beerling (available used on Amazon from $9.74). We will also draw readings from the following texts:

Because the lectures are the primary source of information, it will be essential that you study the lecture notes and attend class. Lecture notes will generally be posted on Vista the afternoon or evening prior to the class. (In order to reduce file size, some graphics & photographs may be omitted.) Reading these notes prior to the class will be helpful for understanding the lecture material.

Course Web Page and Electronic communication
All course materials and communications will be posted on Vista. Email will be used throughout the course, including to submit assignments, so students must have an email account. I will send emails to your email address that is listed on Vista. If this is not your primary email, please make arrangements to have your email forwarded.

Grading
Grades will be determined from your performance in 3 categories of work – exams, take home assignments, and reading of the primary literature. The purpose of having a diversity of graded exercises is to broaden the manner in which you learn, stimulate your interest in inquiry-based (question-driven) thinking about science, and to encourage you to work regularly on the course material.

<table>
<thead>
<tr>
<th>Points</th>
<th>% of final grade</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exam 1</td>
<td>200</td>
</tr>
<tr>
<td>Exam 2</td>
<td>200</td>
</tr>
<tr>
<td>Take Home Assignments (5 @ 40)</td>
<td>200</td>
</tr>
<tr>
<td>Primary Literature (10 @ 20)</td>
<td>200</td>
</tr>
<tr>
<td>Term Paper</td>
<td>200</td>
</tr>
</tbody>
</table>

Total 1000 100
Grades will be determined from the percentage of total points possible: 90 ≤ A ≤ 100%, 80 ≤ B < 90%, 70 ≤ C < 80%, 60 ≤ D < 70%, F < 60%.

1. Exams
There will be two in-term exams. These will consist of a mix of short answer, quantitative problems, and data interpretation questions.

2. Take Home Assignments
There will be five Take Home Assignments during the semester. These will provide opportunities for working quantitative problems of the kinds we consider in class and will valuable in preparing for the exams.


3. Primary Literature
Each week you will find and read a paper from the primary literature that relates to the topic we are discussing in class that week. To receive full credit for these exercises, you must 1) send me a pdf of the paper along with a brief summary of what you learned from it by the due date, and 2) briefly (~1 minute) describe to the rest of the class the purpose of the study described in the paper and the new knowledge produced by the paper. These primary literature assignments will generally be due on Mondays and we’ll start class with your brief presentations. There are many journals that you can access via Cline library to get electronic copies of articles. Some of these include but are not limited to Oecologia, Plant Cell and Environment, Plant Physiology, New Phytologist, Tree Physiology, Functional Ecology, Global Change Biology, Trees Structure and Function.

4. Term Paper and Presentation
The term paper is designed to give you the opportunity to develop your skills in written expression and critical thinking. The focus of your term paper should be a research issue within the discipline of plant physiological ecology that you find interesting and for which you think new research is needed. Your paper should explain why you believe this new research is needed based on the gaps in our understanding, and it should present an outline for the kinds of studies you think are necessary to fill those gaps. It should include a thorough review of the current knowledge on the topic, supported by references to the current literature. An outline of your term paper is due 3 weeks before the final due date. You will present your term paper to the class on April 29. This will consist of a 5 minute oral presentation.

Key Dates – see the Schedule (below) and mark due dates on your calendar.

Late papers, absences, make up exams
Your grade will be reduced by 20% for each day (including weekend days) a take home assignment is late. Give late assignments to me personally or go to the Biology office for an official date and time stamp and then place the paper in my mailbox.

Only an institutional excuse is an acceptable reason for missing an exam. There will be no make up exam for an unexcused absence of a scheduled exam. If you miss an exam because of illness or other non-institutionally recognized reasons, your course grade will be calculated on the basis of the total points of your other exams. If you know in advance that you must miss a scheduled exam for a legitimate reason, you should see me as soon as possible to make arrangements. You must give me an ACADEMIC INSTITUTIONAL EXCUSE FORM at least 5 days prior to the class you will miss.

If you miss class, you are still responsible for all information presented in that class, including lecture and handout materials, changes in the course schedule, changes in exam dates, or other announcements. You should obtain this information from a classmate.

Getting the most out of this course. Be an active participant in this course; ask questions, attend office hours, think about course material outside class, and do the readings!

NAU Course Policies on Special Needs, Academic Integrity, Safe Working and Learning Environment, etc. are available at: http://www3.nau.edu/biology/policies.cfm. Please review these policies if you are not familiar with them.
<table>
<thead>
<tr>
<th>Date</th>
<th>Topic</th>
<th>Reading</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>Introduction to plant physiology: physical principles, units, dimensions</td>
<td>Handouts</td>
</tr>
<tr>
<td>Week 2</td>
<td>Plants and Climate: Early Connections</td>
<td>Beerling Ch. 1, 2, 3</td>
</tr>
<tr>
<td>Week 3</td>
<td>Gas Exchange, the basics. Gradients, diffusion, conductance/resistance</td>
<td>Handouts</td>
</tr>
<tr>
<td>Week 4</td>
<td>Photosynthesis: nuts, bolts, and photons</td>
<td>Taiz &amp; Zeiger, Ch. 7,8,9</td>
</tr>
<tr>
<td>Week 5</td>
<td>Photosynthesis and the Global Carbon Cycle</td>
<td>Taiz &amp; Zeiger, Beerling</td>
</tr>
<tr>
<td>Week 6</td>
<td>Variations on a Theme: C4 and CAM photosynthesis. How do climate and atmospheric CO2 level drive the distribution of C4 and CAM?</td>
<td>Beerling, TBA</td>
</tr>
<tr>
<td>Week 7</td>
<td>Carbon isotope discrimination in photosynthesis: tracing past climate change, understanding the global carbon cycle.</td>
<td>Taiz and Zeiger, Beerling</td>
</tr>
<tr>
<td>Week 8</td>
<td>The dark side: respiration and plant carbon balance</td>
<td>Taiz and Zeiger</td>
</tr>
<tr>
<td>Week 9</td>
<td>The carbon cycle at the local level: litter production, decomposition, interactions with soil organisms.</td>
<td>Chapin et al.</td>
</tr>
<tr>
<td>Week 10</td>
<td>Plant transpiration and the hydrological cycle. How does transpiration compare quantitatively to evaporation from soils and oceans?</td>
<td>Chapin et al.</td>
</tr>
<tr>
<td>Week 11</td>
<td>Regulation of transpiration across scales: stomata, boundary layers, evaporative gradients How will rising CO2 and warmer temperatures affect transpiration? How will altered transpiration feedback to affect climate?</td>
<td>Beerling Ch. 5&amp;6</td>
</tr>
<tr>
<td>Week 12</td>
<td>Optical properties of plants and remote sensing of plant function: pigments, spectra, and satellites.</td>
<td>Beerling Ch. 8 Gamon</td>
</tr>
<tr>
<td>Week 13</td>
<td>Dynamic Global Vegetation Models: How well do they incorporate plant physiology?</td>
<td>TBA</td>
</tr>
<tr>
<td>Week 14</td>
<td>Current climate change: how are plants responding across temporal and spatial scales?</td>
<td>Beerling Ch. 9</td>
</tr>
<tr>
<td>Week 15</td>
<td></td>
<td>TBA</td>
</tr>
</tbody>
</table>
University Curriculum Committee
Proposal for New Course

1. Is this course being proposed for Liberal Studies designation?  
   Yes ☐  No ☒
   If yes, route completed form to Liberal Studies.

2. New course effective beginning what term and year? (ex. Spring 2009, 
   Summer 2009)  See effective dates schedule.  
   Fall 2010

3. College  College of Arts and Letters  Department of Comparative 
   Letters  Cultural Studies

4. Academic Unit /Department

5. Course subject/catalog number  CVC 100  6. Units/Credit Hours  1 credit

7. Long course title  15 Screenings: Film and the Big Screen Experience  
   (max 100 characters including spaces)

8. Short course title (max. 30 characters including spaces)  
   15 Screenings

9. Catalog course description (max. 30 words, excluding requisites).
   Students will be exposed to alternative, independent, and classic film programming by watching and discussing a variety of films that will be shown in public (both local and regional) venues.

10. Grading option:  
    Letter grade  ☐  Pass/Fail ☒  or Both
    (If both, the course may only be offered one way for each respective section.)

11. Co-convened with  
    11a. Date approved by UGC
    (Must be approved by UGC prior to bringing to UCC. Both course syllabi must be presented)

12. Cross-listed with  
    (Please submit a single cross-listed syllabus that will be used for all cross-listed courses.)

13. May course be repeated for additional units?  yes ☐  no ☒
    a. If yes, maximum units allowed?  3
    b. If yes, may course be repeated for additional units in the same term?  yes ☐  no ☒
       (ex. PES 100)

14. Prerequisites (must be completed before proposed course)  
    NA

15. Corequisites (must be completed with proposed course)  
    NA

16. Is the course needed for a new or existing plan of study 
    (major, minor, certificate)?  
    Yes ☐  no ☒
    Name of plan?
    Note: If required, a new plan or plan change form must be submitted with this request.

revised 8/08
17. Is a potential equivalent course offered at a community college (lower division only) yes [X] no [ ] If yes, does it require listing in the Course Equivalency Guide? yes [ ] no [ ]

Please list, if known, the institution and subject/catalog number of the course:

18. Names of current faculty qualified to teach this course: Janna Jones, Paul Helford, Paul Ferlazzo, Irene Mathews, Jon Torn, Astrid Klocke, Kurt Lancaster, Mark Neumann, Paul Donnelly

19. Justification for new course, including unique features if applicable. (Attach proposed syllabus in the approved university format).

The growth of film classes at NAU and universities nationwide has led to the development of a minor in Cinema and Visual Culture. The purpose of CVC 100 is to introduce students to classic and contemporary feature films in a theatrical venue with other audience members. Students will participate in a semester-long film series and/or various film festivals and screenings throughout the semester. Students will develop cinematic analytical and evaluative skills by attending public screenings, writing informed responses, and participating in online and/or in-person discussions with other audience members, special guests and the instructor.

For Official AIO Use Only:
Component Type
Consent
Topics Course

35. Approvals

[Signatures and dates]

[Signatures and dates]

[Signature and date]

For Committees use only

[Signature and date]
Northern Arizona University
College of Arts and Letters
Department of Comparative Cultural Studies
CVC 100: 15 Screenings: Film and the Big Screen Experience
Fall/Spring
1 credit

Instructor: TBA
Class Time: none; see VISTA for schedule of film screenings
Office Hours: TBA
Phone: TBA
Email: TBA

Course Prerequisites: None

Course description:

The purpose of this one credit course is to expose students to alternative, independent, and classic film programming in public, local or regional venues. Students will have the opportunity to see a variety of thoughtful films in public venues, thereby expanding their exposure to cinema beyond mainstream commercial film programming. The fifteen screenings preclude Hollywood films at commercial mainstream theaters, unless approved by instructor. Students are required to attend fifteen films from at least two different series or venues during the semester. They will write one-page reflections about the fifteen films they screen and discuss the films with other students in an on-line environment.

Student Learning Expectations/Outcomes:

This course aims to provide students with the following:

1. Exposure to alternative, independent and classic film programming.
2. Exposure to the cinematic public event

Upon completion of this course, students will have the following:

1. An increased understanding of alternative, independent and classic films and how they fit into a larger cinematic context.
2. An increased capacity for reflecting on the cinematic event and how it shapes the cinematic experience.
3. Experience in comprehending the visual and cultural meanings of alternative, independent and classic films.
4. Experience in communicating meaningful insights germane to the subject of cinema and the cinematic experience.
Course structure/approach:

Students are required to attend fifteen films from at least two different series or venues during the semester. They will write one-page reflections about the fifteen films they screen and discuss the films with other students in an on-line environment.

Textbook and required materials:

There are no required textbooks for this class. Students must attend all introductions (delivered by experts or filmmakers/directors) and discussions (conversations about the films following the screenings). Students must be able to access the Internet Movie Database (www.imdb.com) and other online film sites.

Course outline:

In consultation with the course instructor, students will attend fifteen films from the following options (consult with your instructor for other possible screening venues and options not listed below):

- Tuesday Night Classic Film Series: Cline Library Assembly Hall, Tuesday nights at 7 PM
- Native American Film Series: Cline Library Assembly Hall, Thursday nights at 7 PM
- Asian Studies Film Festival: dates and location to be announced
- International Film Series: dates and location to be announced
- Latin American Film Series: dates and location to be announced
- Tournees French Film Festival: Cline Library Assembly Hall, February
- Flagstaff Mountain Film Festival: Orpheum Theatre, dates to be announced
- Sedona Film Festival: Harkins Theatre, Sedona, February
- Sedona Film Festival Second Tuesday Cinema Series: Harkins Theatre, Sedona, second Tuesday of each month at 7 PM

Assessment of Student Learning Outcomes:

Methods of Assessment:

1. Students will write one-page reflections for all fifteen screenings. The papers will focus on the following:
   A. Response to and reflection of film content
   B. Description of and response to cinematic event, as experienced by students

2. Students will participate in an on-line film discussion with other students:
   A. Students will post at least 5 thoughtful responses (can be derived from papers) to on-line student film discussion during the semester.
   B. Students will post at least five responses to other students’ posts in the on-line student film discussion during the semester.

Timeline for Assessment:

- Papers must be submitted to Vista no later than six days after film screening.
- On-line discussion posts must be submitted no later than six days after film screening.
Grading System:

1. The grading system for the course is pass/fail. In order to receive a passing grade, a student must receive at least 11/15 passing scores on papers, post five paragraph length responses to on-line student film discussion and respond five times to other students’ posts in the on-line student film discussion.

2. Each paper will receive a passing grade if the following is accomplished:
   A. It is at least one page in length
   B. It is posted within six days of the screening
   C. It reflects on some of the content of the film
   D. It takes into account some of the ideas of the introductory speaker or discussants (if applicable).
   E. It describes the student’s experience of watching the film with an audience in a public venue

3. Each on-line posting with receive a passing grade if the following is accomplished:
   A. It is at least a paragraph in length
   B. It is posted within six days of the screening
   C. It focuses on the content of the film and/or the experience of watching the film with an audience

4. Each on-line response to another student’s posting will receive a passing grade if the following is accomplished:
   A. It is at least four sentences in length
   B. It is respectful and directly addresses the ideas of the original post.

Course policies:

1. Papers and on-line discussion posts must be submitted no later than six days after a film screening.
2. Students must be seated at least five minutes before the film event begins.
3. During introductions and discussions, students must take notes on important information that can be used for writing papers and posting thoughtful on-line commentary.
4. Cell phones and pagers are to be disabled and unused during films.
5. There will be no extra credit opportunities.
6. An incomplete or late withdrawal will not be approved in this class except for extreme, verifiable emergencies as approved by the instructor.
7. Because students are able to choose from a variety of different times and venues for when and how they participate in the course, there will be no make-up assignments. However, when students are away from campus for a lengthy period of time—due to unavoidable family problems (which require a notice from the Dean of Student Affairs); illness (with a doctor’s written notice); or official institutional excuses (which require an official institutional absence form)—the professor and the student will work together to find alternative screening opportunities so that the student can complete the missed work.
8. Only the instructor may grant requirement changes.

Academic Honesty: Acts of academic dishonesty, including, but not limited to, cheating, plagiarism, stealing or copying tests are regarded by the University as very serious offenses. Students involved in such activities will be dealt with in accordance with University rules, regulations, and policy.
University policies: See the attached sheet outlining the Safe Working and Learning Environment, Students with Disabilities, Institutional Review Board, and Academic Integrity policies( http://www2.nau.edu/academicadmin/UCCPolicy/plystmnt.html).

Special Needs:
If you have special needs as documented through Disability Support Services, please notify the instructor for the purpose of making special arrangements.

Other:
Evacuation Note:
In the event of an alarm, you must leave the building immediately by the nearest exit, and move away from the building. Do not use the elevators. Please help those who may need assistance in exiting.
University Curriculum Committee
Proposal for new Academic Plan, Plan change, or Plan Deletion

1. College    Arts and Letters
2. Academic
   Unit/Department    English

3. Academic
   Plan Name    Bachelor of Arts in English
4. Subplan (if applicable)?    Certificate

5. Effective Date    FALL  2010

6. Is this proposal for a :
   ☒ New Plan    ☐ Plan Change*
   ☐ New Subplan    ☐ Subplan Change
   ☐ Plan Deletion    ☐ Subplan Deletion

*Plan changes must be accompanied by an updated 8 semester plan.

7.
For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current online academic catalog:
(http://www4.nau.edu/alo/AcademicCatalog/academiccatalogs.htm)
Be sure you include all catalog text that pertains to this plan change.

Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing and strikethrough what is being deleted.
(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)

Certificate Option for Students Majoring in English

General Information

We offer several optional certificates in conjunction with your BA in English program. You may choose certificates in Creative Writing, Linguistics, Literature, or Rhetoric and Writing. Normally, English certificate courses will also apply toward the BA in English.

English majors elect a certificate by submitting a completed “Undergraduate Major/Minor/Certificate Changes” form to the Dean’s Office.

These certificates are available for English majors only. You are awarded a certificate only after you also fulfill requirements for the major in English.

Only courses in which you earn C or better may count toward certificate requirements.

An English major may earn multiple certificates.

See NAU’s Course Catalog for a list of current prerequisites for certificate courses.

Certificate in Creative Writing

To earn this certificate, you must complete the following:
15 units with a minimum cumulative grade point in certificate courses of 3.00. You must also complete requirements for the major in English.

A maximum of 6 units of lower division coursework may count toward this certificate: ENG 270, 271, 272.

A minimum of 9 units of upper division must count toward this certificate: ENG 370W, 371, 470C, 471C, 472C

Capstone courses are repeatable for additional credit with different content.

Under certain circumstances and with instructor and adviser approval, ENG 507 or 509 may substitute for one 400-level course.

Revised 09/07
Certificate in Linguistics

To earn this certificate, you must complete the following 15 units with a minimum cumulative grade point in certificate courses of 2.00. You must also complete requirements for the major in English.

A maximum of 6 units of lower division coursework may count toward this certificate: ENG 121, 220, 223.

A minimum of 9 units of upper division must count toward this certificate: ENG 308, 321, 420C, 421C, 422C.

Capstone courses are repeatable for additional credit with different content.

Certificate in Literature

To earn this certificate, you must complete the following 18 units with a minimum cumulative grade point in certificate courses of 3.00. You must also complete requirements for the major in English.

A maximum of 6 units of lower-division coursework may count toward this certificate: ENG 230, 231, 232, 241, 242, 243, 245, 247, 252, 253, and 261.

Complete at least 6 units of coursework from the following: ENG 327, 331, 333, 335, 336, 337, 341, 342, 345, 351, 358, 360W, 361, 362, 364, 365, and 366.

Complete at least 6 units of coursework from the following: ENG 431C, 441C, 445C, 451C, 460C, 461C, and 467C.

Certificate in Rhetoric and Writing

To earn this certificate, you must complete the following 15 units with a minimum cumulative grade point in certificate courses of 2.00. You must also complete requirements for the major in English.

A maximum of 6 units of lower division coursework may count toward this certificate: ENG 110, 210, 211.

A minimum of 9 units of upper division must count toward this certificate: ENG 302W, 305W, 310W, 313W, 410C, 411C.
8. For undergraduate plans, will this requirement be a student individualized plan? X no  □ yes
   *A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAILS focus, for which coursework requirements are established by the student in consultation with the advisor.
   If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student's individual requirements for the degree audit system.

9. For undergraduate plans, will a milestone** be used to:
   □ a. verify satisfactory completion of a non course requirement.
   □ b. indicate admission to a major.
   X c. will not be used.
   **A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status.
   If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.


We have distinct BA learning outcomes for each main departmental area (creative writing, linguistics, literature, rhetoric). These outcomes are coordinated with the following overall BA goals. (Details about learning outcomes can be found here: https://www4.nau.edu/assessment/main/degree/plans/english_BA_plan_04-09.pdf.)

**Goals for all BA English students**

1. To appreciate the beauty, power, and scope of language and literature
2. To write effectively and grammatically with an awareness of audience and rhetorical purpose
3. To think critically and analytically in response to the reading of various forms of discourse (fiction, poetry, critical essay, etc.)
4. To understand the heritage, both traditional and diverse, embodied in English language and literature
5. To be able to conduct library research on questions of literature, language, and culture including, as appropriate, the use of technological tools
6. To be able to use language creatively—with a sense of imagination, discipline, and stylistic force—for the purposes of self-expression and communication
7. To understand the ways in which language is integrally related to gender, race, ethnicity, histories, and cultures.

11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

The idea for certificate options for English majors arose during faculty discussions of program assessment. The proposal quickly drew support from other long-standing ambitions and concerns for the undergraduate major. The current BA in English has little content-based or proficiency-based definition. Students accumulate a minimum 45 units of English coursework with relatively few restrictions (that's 15 courses from a catalog of more than 70 that can count toward the major); students' highly variable course selections result, in effect, in as many definitions of an English program as we have majors.

Here is a summary of values we see in offering certificate options for these undergraduates.

1. Certificate options will give students contemplating a major in English firmer ideas of courses of study they might embark upon. Prospective majors with a desire to develop talent for writing, for literature, or for the study of language can more clearly envision what we can do for them in a sequence of courses. For recruitment, for gateway advising, for other inquiries about the major, certificate options convey a better picture of undergraduate study in this department than anything we at present can show.

2. Certificate study will help declared, continuing majors monitor their progress toward proficiency in English. Certificate requirements will aid advising and will supply context and rationale for course selection. We think certificate prospects will encourage majors to make better, more regular use of the advising center. We think certificate concentrations will encourage the department and its majors to pay more—and earlier—attention to appropriate post-degree opportunities.

Revised 09/07
3. Attaining a BA in English with a specific certificate will help a graduate verify training for the post-degree marketplace, that is, for prospective application and résumé readers. This is of special value to graduates who have emphasized rhetoric and writing, linguistics, or creative writing and might need to distinguish themselves for educational or employment purposes from the still-prevailing stereotype of the English major as literature based. But all four certificates will help graduates show their preparation, for instance when applying to MA-TESL study, to MFA programs, to graduate school in literature or cultural studies, for international teaching, or for work in organizational communication or technical writing. Many other English departments—most, in fact, among our peer institutions—have seen fit to multi-track their undergraduate English majors in some similar way. Certificates can help equip our graduates to compete with these peers.

4. Certificate options would mark the first significant change to the BA in English in 18 years. These options will help make possible meaningful assessment of the undergraduate major. Such assessment has eluded it for most of those 18 years. And meaningful assessment, we expect, will restart a more orderly process of evolution for us.

12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?

   No change

13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU? If so, attach supporting documentation from the affected departments/units and college dean.

   No change

14. Will present library holdings support this academic plan/subplan?

   No change

Certifications

[Signatures and dates]

For committee use only

[Signature and date]

Action taken: [ ] approved as submitted [ ] approved as modified

Note: Submit original to associate provost's office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.

Revised 09/07
University Curriculum Committee
Proposal for new Academic Plan, Plan change, or Plan Deletion

<table>
<thead>
<tr>
<th>1. College</th>
<th>Arts and Letters</th>
<th>2. Academic Unit/Department</th>
<th>School of Art</th>
</tr>
</thead>
<tbody>
<tr>
<td>3. Academic Plan Name</td>
<td>BS Ed Art Education</td>
<td>4. Subplan (if applicable)?</td>
<td></td>
</tr>
</tbody>
</table>

5. Effective Date    FALL 2010

6. Is this proposal for a:  
   - [ ] New Plan  
   - [x] Plan Change*  
   - [ ] Plan Deletion  
   - [ ] Subplan Deletion  
   - [ ] New Subplan  
   - [ ] Subplan Change

*Plan changes must be accompanied by an updated 8 semester plan.

7. ALL Education plans, please indicate NCATE Designation:  
   - [ ] Initial Plan  
   - [ ] Advanced Plan  
   - [ ] Remove Designation  
   - [ ] Change from Initial to Advanced Plan  
   - [ ] Change from Advanced to Initial Plan
For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the current online academic catalog:
(http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm)
Be sure you include all catalog text that pertains to this plan change.

For New Plans, leave this column blank.

The B.S. Education degree prepares you for a secondary education certificate, with a K-12 endorsement in art.

To earn this degree, complete at least 120 units of coursework, which we describe in the sections that follow:
- at least 35 units of liberal studies requirements. Be aware that you may not use courses with an ARE prefix to satisfy these liberal studies requirements.
- at least 60 units of major requirements
- at least 34 units of teacher-preparation requirements
- elective courses, if needed, to reach an overall total of at least 120 units

Be aware that some courses required for your degree may have prerequisites that you must also take. Check the courses in the appropriate subject. (You may be able to count these prerequisites toward your liberal studies or general elective credit.)

Please note that you must complete NAU's diversity requirements by taking two 3-unit courses, one in U.S. ethnic
diversity and one in global diversity awareness. These courses may be used to meet other requirements within your academic plan if you choose them carefully. Click here for a list of the available diversity courses.

Also be aware that NAU requires that at least 30 units of the courses you take for your degree must be upper-division courses (those numbered 300 and above).

In addition, be aware that you must have a grade point average of at least 2.5 in all of your NAU coursework in order to graduate. This requirement applies to all B.S.Ed. majors at NAU.

Finally, please note that you may be able to use some courses to meet more than one requirement; however, you must still meet the total of at least 120 units to graduate. Contact your advisor for details.

Also be aware that, for the B.S.Ed. degree, you must have the following:
- a grade of at least B for the English foundation requirement (ENG 105 or equivalent)
(If you don’t receive a 3.0, you may complete an additional writing course, at the 200 level or above, with at least a B, to meet this requirement.)
- a grade of at least C for the mathematics foundation requirement (generally MAT 110, 114, 125, or 155)

Candidates in the Art Education program may be used to meet other requirements within your academic plan if you choose them carefully. Click here for a list of the available diversity courses.

Also be aware that NAU requires that at least 30 units of the courses you take for your degree must be upper-division courses (those numbered 300 and above).

In addition, be aware that you must have a grade point average of at least 2.5 in all of your NAU coursework in order to graduate. This requirement applies to all B.S.Ed. majors at NAU.

Finally, please note that you may be able to use some courses to meet more than one requirement; however, you must still meet the total of at least 120 units to graduate. Contact your advisor for details.

Also be aware that, for the B.S.Ed. degree, you must have the following:
- a grade of at least B for the English foundation requirement (ENG 105 or equivalent)
(If you don’t receive a 3.0, you may complete an additional writing course, at the 200 level or above, with at least a B, to meet this requirement.)
- a grade of at least C for the mathematics foundation requirement (generally MAT 110, 114, 125, or 155)

Candidates in the Art Education program are required to demonstrate content knowledge, pedagogical knowledge and skills, and professional knowledge to be eligible to
are required to demonstrate content knowledge, pedagogical knowledge and skills, and professional knowledge to be eligible to enter student teaching or internship placements. Content, pedagogical, and professional knowledge or skills are demonstrated through candidate performance on key assessments embedded in the ARE 200, ARE 308, ARE 330W, ARE 331, ARE 421, ARE 431, ARE 432, BME 437, EDF 200, ECI 300, ECI 322, ECI 450, ECI 465 and ECI 495C classes.

**Major Requirements**

To be prepared to teach kindergarten through 12th grade, complete the following 60 units:

- **ART 135, 136, 150, and 151** (12 units)
- 12 units in art history courses
- **ARE 200, 331, 421, 431, and 432** (15 units)
- **ARE 330W**, which meets NAU's junior writing requirement (3 units)
- 18 units in studio art courses approved by your art education advisor, with at least 9 units in upper-division studio courses
- We also recommend taking **ARE 433**.

Note that PHO courses, ART 100, and ART 101 do not fulfill the requirements of the B.S. Ed Art Education major.

**Teacher-Preparation**

enter student teaching or internship placements. Content, pedagogical, and professional knowledge or skills are demonstrated through candidate performance on key assessments embedded in the ARE 200, ARE 308, ARE 330W, ARE 331, ARE 421, ARE 431, ARE 432, BME 437, EDF 200, ECI 300, ECI 322, ECI 450, ECI 465 and ECI 495C classes.

**Major Requirements**

To be prepared to teach kindergarten through 12th grade, complete the following 85 units:

- **ART 135, 136, 150, and 151** (12 units)
- **ARH 141 and ARH 142** (6 units)
- **ARH Electives** (6 units)
- **ARE 200, 331, 421, 431, and 432** (15 units)
- **ARE 308** (1 unit)
- **ARE 330W**, which meets NAU's junior writing requirement (3 units)

- 18 units in studio **Studio** art courses approved by your art education advisor, with at least 9 units in upper-division studio courses (18 units)
- **EDF 200** (3 units)
- **SET 300** (3 units)
- **BME 437** (3 units)
- **EPS 325** (3 units)
- **ECI 495C** (12 units)
- We also recommend taking **ARE**
**Requirements**
Complete 34 units of professional courses offered by the College of Education to qualify for certification to teach Art in Arizona and most other states.

Click here for more information about Teacher Preparation in Secondary Education. You should also receive advisement from the College of Education for this part of your academic plan.

Please note that for this degree you take ARE 308 in place of ECI 308. Also note that these 31 units include ECI 495C, which meets NAU's senior capstone requirement, and that you must take ARE 432 before ECI 495C.

You should also receive advisement from the College of Education for this part of your academic plan.

**General Electives**
Additional coursework is required if after you have met the previously described requirements you have not yet completed a total of 120 units of credit.

You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren't used to meet major, minor, or liberal studies requirements.)

You must have completed all the coursework used to fill art education major and core requirements within the

---

**ACT 433**
Note that PHO courses, ART 100, and ART 101 do not fulfill the requirements of the B.S. Ed Art Education major.

Please note that ECI 495C meets NAU's senior capstone requirement and that you must take ARE 432 before ECI 495C.

**Teacher-Preparation Requirements**
Complete 34 units of professional courses offered by the College of Education to qualify for certification to teach Art in Arizona and most other states.

Click here for more information about Teacher Preparation in Secondary Education. You should also receive advisement from the College of Education for this part of your academic plan.

Please note that for this degree you take ARE 308 in place of ECI 308. Also note that these 31 units include ECI 495C, which meets NAU's senior capstone requirement, and that you must take ARE 432 before ECI 495C.

You should also receive advisement from the College of Education for this part of your academic plan.

**General Electives**
Additional coursework is required if after you have met the previously described requirements you have not yet completed a total of 120 units of credit.

You may take these remaining courses from any academic areas, using these courses to pursue your specific interests and goals. We encourage you to consult with your advisor.
last 10 years.

Click here for more information about our Art School Faculty.

Click on any of the following links for course information.
- art undergraduate courses
- art graduate courses
- art education undergraduate courses
- art education graduate courses

to select the courses that will be most advantageous to you. (Please note that you may also use prerequisites or transfer credits as electives if they weren’t used to meet major, minor, or liberal studies requirements.)

You must have completed all the coursework used to fill art education major and core requirements within the last 10 years.

Click here for more information about our Art School Faculty.

Click on any of the following links for course information.
- art undergraduate courses
- art graduate courses
- art education undergraduate courses
- art education graduate courses

8. For undergraduate plans, will this requirement be a student individualized plan*? X no □ yes
    *A Student Individualized Plan is an academic requirement that varies by student, such as the 15-unit BAILS focus, for which coursework requirements are established by the student in consultation with the advisor.

If yes, the academic unit listed at the top of this form hereby takes responsibility for providing complete information about each student’s individual requirements for the degree audit system.

9. For undergraduate plans, will a milestone** be used to:
    □ a. verify satisfactory completion of a non course requirement.
    □ b. indicate admission to a major.
    X c. will not be used.
    **A Milestone is used to record noncourse requirements, such as the HRM 800-hour work experience requirement or admission to Business Major status.

If yes, the academic unit listed at the top of this form hereby takes responsibility for maintaining the milestone and keeping individual student records up to date.


    All students graduating with a BS Ed Secondary in Art will be able to:
    • Make good judgments about qualitative relationships
    • Consider more than one solution or answer to individual problems
    • Celebrate and value multiple perspectives
    • Problem solve in complex ways
    • Effectively communicate beyond words and numbers
    • Examine subtleties
• Think through and within material
• Express what cannot be said
• Explore the range and variety of human experience
• Value the arts as integral to human expression and existence

11. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

In accordance with directives from the Board of Regents and NAU upper administration to pave the way for students to be able to graduate in eight semesters, the art education program proposes the elimination of ECI 322, ECI 450, and ECI 465 from required coursework. These courses are redundant. Content in the ECI courses is covered in depth in ARE 331, ARE 421, ARE 431, and ARE 432.

Art education courses meet state and national art education standards as well as state and national teacher preparation standards.

In addition, we are proposing to remove ARE 433 because it has not been taught for five years and we do not intend to teach it in the future.

These changes will streamline the art education program to 120 credits.

12. If this academic plan/subplan will require additional faculty, space, or equipment, how will these requirements be satisfied?

No

13. Will this academic plan/subplan affect other majors, liberal studies course offerings, plans/subplans, curricula, or enrollment at NAU?

If so, attach supporting documentation from the affected departments/units and college dean.

No

14. Will present library holdings support this academic plan/subplan?

Yes

Certifications

[Signatures]

Department Chair/ Unit Head (if appropriate)

[Signature]

Chair of College Curriculum Committee

[Signature]

Dean of College

[Signature]

For committee use only

[Signature]

For University Curriculum Committee

Action taken: ______ approved as submitted ______ approved as modified

Note: Submit original to associate provost’s office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.
MEMO

To: Dr. Tom Patin, Director, School of Art
From: Kathy Hildebrand, Representing the Professional Education Unit Steering Committee (PEUSC)
Date: 02/19/2010

I write in my capacity as the Northern Arizona University NCATE coordinator. This review concerns compliance with NCATE accreditation and Arizona Department of Education approval to issue an institutional recommendation. *This memo addresses accreditation and state review issues only, and should not be construed as an endorsement of any proposed changes.*

**Regarding:** NCATE accreditation implications of the undergraduate Art Education proposed program changes.

**Accreditation Verification:** The proposed Art Education program changes maintain documentation of candidate performance regarding institutional, state, and national level standards and criteria required for NAU’s NCATE accreditation status.

**Rationale:** The Art Education program proposes to drop the following courses from the program that were used for NCATE unit level documentation of undergraduate candidates’ knowledge and skills: ECI 322, ECI 450 and ECI 465.

Evidence of state standards and unit level NCATE criteria gathered through key assessments in ECI 322, ECI 450 and ECI 465 are evidenced in key assessments housed within the Art Education courses ARE 330W, ARE 331, ARE 421, ARE 431, and ARE 432. The Art Education program faculty members have provided documentation of mapping the state standards and unit level criteria evidenced in the ECI assessments to Art Education assessments and rubrics.
February 24, 2010

Dr. Sandra J. Stone, Professor and Chair
Northern Arizona University
College of Education
Box 5774
Flagstaff, AZ 86011-5774
Sandra.stone@nau.edu
928-523-4280

Dear Dr. Ron Pitt, Dr. Tom Patin, Director, School of Art, and the University Curriculum Committee:

We, the secondary faculty of Teaching and Learning (T & L) in the College of Education, have reviewed the document submitted to the University Curriculum Committee, which would eliminate all of the required courses from our T & L program of study for secondary education undergraduates (ECI 322, ECI 450 and ECI 465).

We do not support this proposal. The following reasons summarize our concerns:

1. **Proceeds without discussion:** The secondary faculty of T & L was not involved in any discussions of how the BSED Art Education degree would affect the College of Education Secondary Education program. Please note that a letter from Dr. Kathy Hildebrand is not a letter of support from the College of Education for the BS ED Art Education degree.

2. **Eliminates inclusive approach to pedagogical issues:** Faculty from secondary education in T & L agree that the T & L courses offer students more than just pedagogy within the discipline; it presents a different perspective with an inclusive nature of teaching across disciplines because of our pedagogical approach to learning. Students from different content areas are in constant discussion throughout each semester.

3. **Compromises viability of the BSED in secondary education:** Withdrawal of the Art undergraduate students will significantly affect and negatively impact the viability of our BSED in Secondary Education from the College of Education and endanger the continuance of this program.

4. **Produces negative repercussions for other content areas programs:** Not all colleges will be able to offer their own BSED. Students from various content areas will be denied the opportunity to get a BSED because of the low numbers in their respective colleges.

Respectfully, we, the secondary faculty of T & L, would recommend that the Art department look for other avenues to offer reduced class loads for students without withdrawing from the Teaching and Learning courses in the College of Education.

If you have any questions, please don’t hesitate to contact me.

Sincerely,

Sandra J. Stone, Ed. D.
Professor and Chair
Department of Teaching and Learning
<table>
<thead>
<tr>
<th>NAME</th>
<th>SIGNATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>ASNAU</td>
<td></td>
</tr>
<tr>
<td>BAIN, CRAIG (FCB)</td>
<td></td>
</tr>
<tr>
<td>BATTLES, PATRICK (CAL)</td>
<td></td>
</tr>
<tr>
<td>GEORGAS, JOHN (CEFNS)</td>
<td></td>
</tr>
<tr>
<td>HAMMERSLEY, CHARLES (SBS)</td>
<td></td>
</tr>
<tr>
<td>HOLCOMB, SARAH (FCB)</td>
<td></td>
</tr>
<tr>
<td>KNIGHTS, KATHLEEN (SBS)</td>
<td></td>
</tr>
<tr>
<td>KOZAK, KATHRYN (CCC)</td>
<td></td>
</tr>
<tr>
<td>LIBRARY – CATHERINE PETERSEN</td>
<td>Laura Taylor Sarah Taylor</td>
</tr>
<tr>
<td>LOCKARD, LOUISE (COE)</td>
<td>Louise LOCKARD</td>
</tr>
<tr>
<td>POLLAK, PEGGY (CEFNS)</td>
<td></td>
</tr>
<tr>
<td>RAYMOND, DEBORAH (CAL)</td>
<td></td>
</tr>
<tr>
<td>RIEMER, FRANCES (SBS)</td>
<td></td>
</tr>
<tr>
<td>ROBYN, LINDA (Liberal Studies)</td>
<td></td>
</tr>
<tr>
<td>SENESE, GUY (COE)</td>
<td></td>
</tr>
<tr>
<td>STAMER, RICK (CAL)</td>
<td></td>
</tr>
<tr>
<td>ST. LAURENT, ROY (CEFNS)</td>
<td></td>
</tr>
<tr>
<td>SUMMERFELT, FRED (CHHS)</td>
<td></td>
</tr>
<tr>
<td>WARING, KRISTEN (FAC. SENATE)</td>
<td></td>
</tr>
<tr>
<td>EX OFFICIO</td>
<td>SIGNATURE</td>
</tr>
<tr>
<td>-------------------------</td>
<td>---------------------------</td>
</tr>
<tr>
<td>ANASTASSIOU, PAM</td>
<td></td>
</tr>
<tr>
<td>BAI, MONICA (Gateway)</td>
<td></td>
</tr>
<tr>
<td>BRADFORD, ERIC</td>
<td></td>
</tr>
<tr>
<td>DEEGAN, PATRICK</td>
<td></td>
</tr>
<tr>
<td>HARRIS, NICOLE</td>
<td></td>
</tr>
<tr>
<td>HEGG, LUCY</td>
<td></td>
</tr>
<tr>
<td>MARTIN, DARRELLE</td>
<td></td>
</tr>
<tr>
<td>PITT, RON</td>
<td></td>
</tr>
<tr>
<td>ROGERS, THERESA</td>
<td></td>
</tr>
<tr>
<td>WILLIAMS, LISA</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>GUESTS</th>
<th>SIGNATURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pam Stephens</td>
<td>Pam Stephens</td>
</tr>
<tr>
<td>Janna Jones</td>
<td>Janna Jones</td>
</tr>
<tr>
<td>Pauline Ervin</td>
<td>Pauline Ervin</td>
</tr>
<tr>
<td>Christine Lemley</td>
<td>Christine Lemley</td>
</tr>
<tr>
<td>Sandra Stone</td>
<td>Sandra Stone</td>
</tr>
<tr>
<td>Jay Farness</td>
<td>Jay Farness</td>
</tr>
</tbody>
</table>