I. APPROVAL OF ORDER OF AGENDA

II. APPROVAL OF MINUTES

March 03, 2009

III. NOTIFICATION

AGM 222  Compact Power Equipment Repair 1 001
Effective: Summer 2010
Inactivate
Articulation Status: Transfers to CSU
General Education Status: Not approved for GE
Program Impact:
1. Landscape and Park Maintenance Certificate of Achievement
2. Nursery Production Certificate of Achievement
3. Recreational Land Management A.S. Degree
Faculty author verified there is no adverse effect to any affiliated programs.

AUBDY 304  Automotive Collision Repair 4 009
Effective: Summer 2010
Inactivate
Articulation Status: Does not transfer
General Education Status: Not approved for GE
Program Impact:
1. Autobody/Collision Repair Certificate of Achievement

AUBDY 351  Auto Body Collision Repair 1 019
Effective: Summer 2010
Inactivate
Articulation Status: Does not transfer
General Education Status: Not approved for GE
Program Impact:
1. Autobody/Refinishing Skills Recognition Award

AUBDY 352  Auto Body Collision Repair 2 027
Effective: Summer 2010
Inactivate
Articulation Status: Does not transfer
General Education Status: Not approved for GE
Program Impact: None
MUSA 155  Vocal Master Class  
**Effective:** Summer 2009 *Expedited!*
**Modify:** Requisites
**Enrollment Restrictions:** Adding: (C) Concurrent enrollment in MUSA 153 or MUSA 154
**Distance Education Status:** Not approved for Distance Education
**Materials Fee Status:** None
**Articulation Status:** Transfers to CSU
**General Education Status:** Not approved for GE

### IV. DISCUSSION

AGEC 210  Elements of Agricultural Economics  
**Effective:** Summer 2010
**Modify:** Description, restrictions, course goal, learning goals, content, typical assignments, methods of instruction, methods of assessment
**Enrollment Restrictions:** Adding: (A) Satisfactory completion of or concurrent enrollment in MATH 70
**Distance Education Status:** Not approved for Distance Education
**Materials Fee Status:** None
**Articulation Status:** Transfers to CSU
**General Education Status:** Approved for MJC-GE: B, CSU-GE: D2

AUBDY 301  Automotive Collision Repair 1  
**Effective:** Summer 2010
**Modify:** Description, materials fees, course goal, learning goals, content, typical assignments, methods of assessment, textbooks
**Enrollment Restrictions:** None
**Distance Education Status:** Not approved for Distance Education
**Materials Fee Status:** Requesting fee increase from $25.00 to $45.00.
**Articulation Status:** Does not transfer.
**General Education Status:** Not approved for GE

AUBDY 302  Automotive Collision Repair 2  
**Effective:** Summer 2010
**Modify:** Description, materials fees, course goal, learning goals, content, typical assignments, methods of instruction, methods of assessment, textbooks
**Enrollment Restrictions:** Maintaining: (P) Satisfactory completion of AUBDY 301
**Distance Education Status:** Not approved for Distance Education
**Materials Fee Status:** Requesting fees: $50.00
**Articulation Status:** Does not transfer
**General Education Status:** Not approved for GE

AUBDY 321  Automotive Spray Refinishing 1  
**Effective:** Summer 2010
**Modify:** Materials fees, course goal, content, typical assignments, methods of assessment
**Enrollment Restrictions:** None
**Distance Education Status:** Not approved for Distance Education
**Materials Fee Status:** Requesting fees: $35.00
**Articulation Status:** Does not transfer
**General Education Status:** Not approved for GE
<table>
<thead>
<tr>
<th>CRN</th>
<th>Course Title</th>
<th>Units</th>
<th>Effective Start</th>
<th>Expedited</th>
<th>Modify:</th>
<th>Restriction(s)</th>
<th>Distance Education Status</th>
<th>Materials Fee Status</th>
<th>Articulation Status</th>
<th>General Education Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC 311</td>
<td>Basic Automotive Systems</td>
<td>4</td>
<td>Summer 2010</td>
<td></td>
<td></td>
<td>None</td>
<td>Not approved for Distance Education</td>
<td>Maintaining fees: $27.00</td>
<td>Does not transfer</td>
<td>Not approved for GE</td>
</tr>
<tr>
<td>CGR 211</td>
<td>InDesign and Typography 1</td>
<td>3</td>
<td>Summer 2009</td>
<td>Expedited</td>
<td></td>
<td>Maintaining: (A) Basic computer skills</td>
<td>Not approved for Distance Education</td>
<td>None</td>
<td>Transfers to CSU.</td>
<td>Not approved for GE</td>
</tr>
<tr>
<td>CGR 214</td>
<td>Bindery</td>
<td>3</td>
<td>Summer 2009</td>
<td>Expedited</td>
<td></td>
<td>None</td>
<td>Not approved for Distance Education</td>
<td>None</td>
<td>Transfers to CSU.</td>
<td>Not approved for GE</td>
</tr>
<tr>
<td>CGR 223</td>
<td>Lithographic &amp; Flexographic Printing</td>
<td>3</td>
<td>Summer 2009</td>
<td>Expedited</td>
<td></td>
<td>None</td>
<td>Not approved for Distance Education</td>
<td>None</td>
<td>Transfers to CSU.</td>
<td>Not approved for GE</td>
</tr>
<tr>
<td>CGR 224</td>
<td>Illustrator and Electronic Publishing</td>
<td>3</td>
<td>Summer 2009</td>
<td>Expedited</td>
<td></td>
<td>None</td>
<td>Not approved for Distance Education</td>
<td>None</td>
<td>Transfers to CSU.</td>
<td>Approved for MJC Activities</td>
</tr>
<tr>
<td>CGR 331</td>
<td>InDesign and Typography 2</td>
<td>3</td>
<td>Summer 2009</td>
<td>Expedited</td>
<td></td>
<td>Requesting: (P) CGR 211. Removing: (A) CGR 211 &amp; CGR 212</td>
<td>Not approved for Distance Education</td>
<td>None</td>
<td>Does not transfer.</td>
<td>Not approved for GE</td>
</tr>
</tbody>
</table>
CGR 332  
**Advanced Presses**

*Effective:* Summer 2009 **Expedited!**

*Modify:* Effective date

*Enrollment Restrictions:* Maintaining (A) Satisfactory completion of CGR 214, 223, or equivalent training.

*Distance Education Status:* Not approved for Distance Education

*Materials Fee Status:* None

*Articulation Status:* Does not transfer.

*General Education Status:* Not approved for GE

---

FSCI 322  
**Fire Service Career Development/Promotions**

*Effective:* Summer 2010

*Modify:* Title, hours, restrictions, course goal, learning goals, content, typical assignments, methods of instruction, methods of assessment

*Enrollment Restrictions:* Requesting: (P) Satisfactory completion of FSCI 301

*Distance Education Status:* Not approved for Distance Education

*Materials Fee Status:* None

*Articulation Status:* Does not transfer

*General Education Status:* Not approved for GE

---

FSCI 369  
**Training Instructor 1C**

*Effective:* Spring 2009 **Expedited!**

*Adopt*

*Enrollment Restrictions:* Requesting: (P) Satisfactory completion of FSCI 353

*Distance Education Status:* Not approved for Distance Education

*Materials Fee Status:* Requesting fees: $165.00

*Articulation Status:* Does not transfer

*General Education Status:* Not approved for GE

---

GUIDE 109  
**International Student / New American Focus**

*Effective:* Summer 2010

*Modify:* Title, description, restrictions, course goal, learning goals, typical assignments, methods of instruction, methods of assessment

*Enrollment Restrictions:* Requesting: (A) Before enrolling in this course, students are strongly advised to have eligibility for ESL 45, 46

*Distance Education Status:* Not approved for Distance Education

*Materials Fee Status:* None

*Articulation Status:* Transfers to CSU

*General Education Status:* Approved for MJC Guidance

---

GUIDE 110  
**Educational Planning**

*Effective:* Summer 2010

*Modify:* Course goal, typical assignments, methods of instruction, methods of assessment

*Enrollment Restrictions:* None

*Distance Education Status:* Maintaining: Online

*Materials Fee Status:* None

*Articulation Status:* Transfers to CSU

*General Education Status:* Approved for MJC Guidance
<table>
<thead>
<tr>
<th>Guide</th>
<th>Course Title</th>
<th>Units</th>
<th>2009-2010</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUIDE 111</td>
<td>Career Awareness</td>
<td>1</td>
<td>217</td>
</tr>
<tr>
<td>GUIDE 112</td>
<td>Job Hunting Skills</td>
<td>1/2</td>
<td>227</td>
</tr>
<tr>
<td>GUIDE 116</td>
<td>Orientation for Re-Entry Adults</td>
<td>2</td>
<td>235</td>
</tr>
<tr>
<td>INTEC 203</td>
<td>Industrial Mechanical/Pneumatic Components and Equipment</td>
<td>3</td>
<td>243</td>
</tr>
<tr>
<td>MATH 101</td>
<td>Mathematical Ideas and Applications</td>
<td>3</td>
<td>253</td>
</tr>
</tbody>
</table>

**GUIDE 111  Career Awareness**
- **Effective:** Summer 2010
- **Modify:** Course goal, content, typical assignments, methods of instruction, methods of assessment
- **Enrollment Restrictions:** None
- **Distance Education Status:** Removing: Online
- **Materials Fee Status:** Maintaining fee: $18.00
- **Articulation Status:** Transfers to CSU
- **General Education Status:** Approved for MJC Guidance

**GUIDE 112  Job Hunting Skills**
- **Effective:** Summer 2010
- **Modify:** Title, description, repetitions, course goal, learning goals, content, typical assignments, methods of instruction, methods of assessment
- **Enrollment Restrictions:** None
- **Distance Education Status:** Not approved for Distance Education
- **Materials Fee Status:** None
- **Articulation Status:** Transfers to CSU
- **General Education Status:** Approved for MJC Guidance

**GUIDE 116  Orientation for Re-Entry Adults**
- **Effective:** Summer 2010
- **Modify:** Description, course goal, learning goals, content, typical assignments, methods of instruction, methods of assessment
- **Enrollment Restrictions:** None
- **Distance Education Status:** Not approved for Distance Education
- **Materials Fee Status:** None
- **Articulation Status:** Transfers to CSU
- **General Education Status:** Approved for MJC Guidance

**INTEC 203  Industrial Mechanical/Pneumatic Components and Equipment**
- **Effective:** Summer 2010
- **Modify:** Title, description, restrictions, course goal, learning goals, typical assignments, methods of instruction, methods of assessment
- **Enrollment Restrictions:** Requesting: (A) Satisfactory completion of ENGL 101, (P) Satisfactory completion of ENGL 50
- **Distance Education Status:** Not approved for Distance Education
- **Materials Fee Status:** None
- **Articulation Status:** Transfers to CSU and UC
- **General Education Status:** Approved for MJC-GE: C, CSU-GE: C2, IGETC: 3B

**MATH 101  Mathematical Ideas and Applications**
- **Effective:** Summer 2010
- **Modify:** Course goal, typical assignments, methods of instruction, methods of assessment
- **Enrollment Restrictions:** Maintaining: (P) Satisfactory completion of MATH 90
- **Distance Education Status:** Not approved for Distance Education
- **Materials Fee Status:** None
- **Articulation Status:** Transfers to CSU and UC
- **General Education Status:** Approved for MJC-GE: D2, CSU-GE: B4, IGETC: 2M
MATH 105  Structure of Mathematics 1  
**Effective:** Fall 2009  
Modify: Course goal, typical assignments, methods of assessment  
Enrollment Restrictions: Maintaining: (P) Satisfactory completion of MATH 90  
Distance Education Status: Not approved for Distance Education  
Materials Fee Status: None  
Articulation Status: Transfers to CSU and UC  
General Education Status: Approved for MJC-GE: D2, CSU-GE: B4

MATH 106  Structure of Mathematics 2  
**Effective:** Summer 2010  
Modify: Restrictions, course goal, typical assignments, methods of assessment  
Enrollment Restrictions: Requesting: (P) Satisfactory completion of MATH 105  
Distance Education Status: Not approved for Distance Education  
Materials Fee Status: None  
Articulation Status: Transfers to CSU and UC  
General Education Status: Approved for MJC-GE: D2, CSU-GE: B4

MATH 121  Pre-Calculus 1  
**Effective:** Fall 2009  
Modify: Description, course goal, typical assignments, methods of instruction, methods of assessment  
Enrollment Restrictions: Maintaining: (P) Satisfactory completion of MATH 90  
Distance Education Status: Not approved for Distance Education  
Materials Fee Status: None  
Articulation Status: Transfers to CSU and UC  
General Education Status: Approved for MJC-GE: D2, CSU-GE: B4, IGETC 2A

NR 200  Soils  
**Effective:** Summer 2010  
Modify: Course goal, learning goals, typical assignments, methods of instruction, methods of assessment  
Enrollment Restrictions: None  
Distance Education Status: Not approved for Distance Education  
Materials Fee Status: None  
Articulation Status: Transfers to CSU and UC  
General Education Status: Approved for MJC-GE: A, CSU-GE: B1/B3, IGETC: 5B

V. PROGRAMS

Certificate of Achievement Auto Body Collision Repair  
AA Degree Auto Body Collision Repair  
AS Degree Auto Body Collision Repair

Apprenticeship Program
VI. UNFINISHED BUSINESS

Informational Items

1. **Title 5 Compliance Progress**
   
   K. Walters Dunlap / B. Adams
   
   No report

2. **CurricUNET Trainings**
   
   B. Adams
   
   a. Training scheduled
   
   March 12, 2009  FH 154  3:00 – 4:30
   
   March 26, 2009  FH 154  3:00 – 4:30

3. **End of year review session**
   
   B. Adams
   
   a. April 14
   
   b. Pizza and soda provided

VII. NEW BUSINESS

Action Items

1. **Enforcement of Requisites**
   
   S. Agostini / L. Senechal

2. **CurricUNET Approval Process**
   
   B. Adams

Informational Items

1. **Title V and Catalog Rights**
   
   S. Agostini / B. Adams

VIII. TASK FORCES

1. **Special Topics, Experimental, Independent, Work-Experience Task Force**
   
   B. Adams
   
   No report

2. **CurricUNET Implementation Task Force Update**
   
   B. Sanders / B. Adams
   
   Outline Tool

IX. PUBLIC COMMENT
I. APPROVAL OF ORDER OF AGENDA

II. APPROVAL OF MINUTES

M/S/U to approve the minutes of Feb. 17, 2009 with revisions noted.

III. NOTIFICATION

Hearing no objections, the committee was notified of the following actions:

LDTP “TCSU” Identifiers

The following courses have been approved for TCSU numbers effective Fall 2009.

<table>
<thead>
<tr>
<th>MJC Course</th>
<th>LDTP ID</th>
<th>Status</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADJU 201</td>
<td>TCSU CJ 110</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>ANTHR 101/ANTHR 105</td>
<td>TCSU ANTH 110</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>ANTHR 102</td>
<td>TCSU ANTH 120</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>ANTHR 104</td>
<td>TCSU ANTH 130</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>ANTHR 130</td>
<td>TCSU ANTH 150</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>ART 120</td>
<td>TCSU ART 210</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>ART 124</td>
<td>TCSU ART 230</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>ART 164</td>
<td>TCSU ART 110</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>BIO 101 &amp; BOT 101 &amp; ZOOL 101</td>
<td>TCSU BIOL SEQ A</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>BUSAD 201</td>
<td>TCSU BUS 110</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>BUSAD 202</td>
<td>TCSU BUS 120</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>CMPSC 202</td>
<td>TCSU IS 120</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>CMPSC 205</td>
<td>TCSU CSCI 110</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>CMPSC 261</td>
<td>TCSU CSCI 120</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>FDNTR 219</td>
<td>TCSU NUTR 110</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>GEOG 101</td>
<td>TCSU GEOG 110</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>GEOG 102</td>
<td>TCSU GEOG 120</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>HIST 101</td>
<td>TCSU HIST 130</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>HIST 102</td>
<td>TCSU HIST 140</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>HIST 106</td>
<td>TCSU HIST 150</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>MATH 171</td>
<td>TCSU MATH 210</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>MATH 171 &amp; MATH 172</td>
<td>TCSU MATH SEQ A1</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>MATH 172</td>
<td>TCSU MATH 220</td>
<td>Accepted as proposed</td>
</tr>
<tr>
<td>MATH 173</td>
<td>TCSU MATH 230</td>
<td>Accepted as proposed</td>
</tr>
</tbody>
</table>
Cross-listed Courses

In fall of 2008, the following courses were reviewed by the Curriculum Committee without their cross-listings also being identified for review. Per Karen Walters Dunlap, those approved actions should also take place on following cross-listed courses effective Summer 2009. Please note: the course outlines for the cross-listed courses will need to be updated in CurricUNET to correspond to the updates which took place on the parent course. Please see the meeting minutes of the date referenced to review what modifications took place.

<table>
<thead>
<tr>
<th>Course</th>
<th>Cross-listing</th>
<th>Meeting Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>MUSC 111 (formerly MUSIC 172)</td>
<td>RATV 172</td>
<td>November 6, 2007</td>
</tr>
<tr>
<td>MUST 103 (formerly MUSIC 176)</td>
<td>CLDDV 292</td>
<td>November 6, 2007</td>
</tr>
<tr>
<td>MUST 106 (formerly MUSIC 177)</td>
<td>CLDDV 293</td>
<td>November 6, 2007</td>
</tr>
<tr>
<td>MUSC 112 (formerly MUSIC 178)</td>
<td>RATV 178</td>
<td>November 6, 2007</td>
</tr>
</tbody>
</table>

CLDDV 280 School-Age Development 3 XX
CLDDV 281 School-Age Program and Curriculum 3

At the request of the division, these two courses are being removed from the MJC-GE pattern (Area B). Research by R. Cranley turned up no evidence that they were actually ever approved for placement in that area so they will be removed effective Summer 2009 Expedited!

FILM 153 Contemporary Film 3
Effective: Summer 2009 Expedited!
Modify: Materials Fees
Enrollment Restrictions: None
Distance Education Status: Not approved for Distance Education
Materials Fee Status: Fee increasing to $104.25
Articulation Status: Transfers to CSU.
General Education Status: Approved for MJC-GE:C
Fee is for cost to attend 15 movie showings at a theater. Ticket price has gone up necessitating this fee increase.

MUSIC 179 Jazz Solo Voice 1 XX
Effective: Summer 2009 Expedited!
Inactivate

MUSIC 182 Music Theory Fundamentals and Beyond: From Intervals to Inventions 1 XX
Effective: Summer 2009 Expedited!
Inactivate
General Education Status: Remove from MJC Activities

MUSIC 185 Chorus 1 XX
Effective: Summer 2009 Expedited!
Inactivate
General Education Status: Remove from MJC Activities
PEC  136  Indoor Rock Climbing  1  XX
Effective: Summer 2009 Expedited!
Modify: Description
Enrollment Restrictions: None
Distance Education Status: Not approved for Distance Education
Materials Fee Status: None
Articulation Status: Transfers to CSU.
General Education Status: Approved for MJC: Activities
Catalog production editing revealed a typographical error in the facility name. Fees notation was also modified to reflect the type of fee and to follow stylistic guidelines of materials fees statements.

III. CONSENT

MUST  120  Music Theory Review  1  XX
Effective: Summer 2009 Expedited!
Modify: Prefix & number
Enrollment Restrictions: None
Distance Education Status: Not approved for Distance Education
Materials Fee Status: None
Articulation Status: Transfers to CSU
General Education Status: Not approved for GE
This course (formerly MUSIC 183) was missed in the restructuring of the MUSIC courses earlier this academic year.

Hearing no objections, MODIFICATIONS to MUST 120 were approved.

IV. DISCUSSION

CGR  211  InDesign and Typography 1  3  XX
Effective: Summer 2010
Modify: Title, description, restrictions, course goal, content, typical assignments, methods of instruction, methods of assessment, textbooks
Enrollment Restrictions: Removing: (C) CGR 212. Adding: (A) Basic computer skills
Distance Education Status: Not approved for Distance Education
Materials Fee Status: None
Articulation Status: Transfers to CSU.
General Education Status: Approved for MJC Activities
M/S/U to approve MODIFICATIONS to CGR 211 (J. Beebe, J. Daly)
M/S/U to approve modifications to ENROLLMENT RESTRICTIONS for CGR 211 (C. Hudelson Putnam, J. Beebe)
M/S/U to maintain ACTIVITIES PLACEMENT for CGR 211 (K. Ennis, C. Hudelson Putnam)

CGR  214  Bindery  3
Effective: Summer 2010
Modify: Title, description, course goal, content, typical assignments, methods of assessment
Enrollment Restrictions: None
Distance Education Status: Not approved for Distance Education
Materials Fee Status: None
Articulation Status: Transfers to CSU.
General Education Status: Not approved for GE
M/S/U to approve MODIFICATIONS to CGR 214 (J. Beebe, J. Daly)
CGR 222  
**Image Assembly and Platemaking**  
**Effective:** Summer 2010  
**Modify:** Units, description, course goal, typical assignments, methods of assessment  
**Enrollment Restrictions:** Maintaining (A) Satisfactory completion of OFADM 351 and CGR 214.  
**Distance Education Status:** Not approved for Distance Education  
**Materials Fee Status:** None  
**Articulation Status:** Transfers to CSU.  
**General Education Status:** Not approved for GE  
**M/S/U to approve MODIFICATIONS to CGR 222 (J. Beebe, J. Daly)**  
**M/S/U to maintain ENROLLMENT RESTRICTIONS for CGR 222 (C. Hudelson Putnam, J. Beebe)**

CGR 223  
**Lithographic & Flexographic Printing**  
**Effective:** Summer 2010  
**Modify:** Title, description, restrictions, course goal, learning goals, content, typical assignments, methods of instruction, methods of assessment, repetitions  
**Enrollment Restrictions:** Removing: (A) CGR 214  
**Distance Education Status:** Not approved for Distance Education  
**Materials Fee Status:** None  
**Articulation Status:** Transfers to CSU.  
**General Education Status:** Not approved for GE  
**M/S/U to approve MODIFICATIONS to CGR 223 (J. Beebe, J. Daly)**  
*(Enrollment restrictions pulled for discussion by M.Garcia)*  
**M/S/U to remove ENROLLMENT RESTRICTIONS for CGR 223 (C. Hudelson Putnam, J. Beebe)**

CGR 224  
**Illustrator and Electronic Publishing**  
**Effective:** Summer 2010  
**Modify:** Title, description, restrictions, course goal, learning goals, content, typical assignments, methods of assessment, textbooks  
**Enrollment Restrictions:** Removing: (A) OFADM 351  
**Distance Education Status:** Not approved for Distance Education  
**Materials Fee Status:** None  
**Articulation Status:** Transfers to CSU.  
**General Education Status:** Approved for MJC Activities  
**M/S/U to approve MODIFICATIONS to CGR 224 (J. Beebe, J. Daly)**  
*(Enrollment restrictions pulled for discussion by M.Garcia)*  
**M/S/U to remove ENROLLMENT RESTRICTIONS for CGR 224 (C. Hudelson Putnam, J. Beebe)**  
**M/S/U to maintain ACTIVITIES PLACEMENT for CGR 224 (K. Ennis, C. Hudelson Putnam)**

CGR 331  
**InDesign and Typography**  
**Effective:** Summer 2010  
**Modify:** Title, description, field trips, restrictions, course goal, learning goals, content, typical assignments, methods of assessment, textbooks  
**Enrollment Restrictions:** Maintaining: (P) CGR 211. Removing: (P) CGR 212  
**Distance Education Status:** Not approved for Distance Education  
**Materials Fee Status:** None  
**Articulation Status:** Does not transfer.  
**General Education Status:** Not approved for GE  
**M/S/U to approve MODIFICATIONS to CGR 331 (J. Beebe, J. Daly)**  
*(Enrollment restrictions pulled for discussion by S. Agostini)*  
**M/S/U to POSTPONE definitely approval of ENROLLMENT RESTRICTIONS for CGR 331 due to uncertainty about the course author's intent (K.Ennis, D. Pollard)**
CGR 332  Advanced Presses  3
Effective: Summer 2010
Modify: Title, course goal, learning goals, content, typical assignments, methods of instruction, methods of assessment
Enrollment Restrictions: Maintaining (A) Satisfactory completion of CGR 214, 223, or equivalent training.
Distance Education Status: Not approved for Distance Education
Materials Fee Status: None
Articulation Status: Does not transfer.
General Education Status: Not approved for GE

M/S/U to approve MODIFICATIONS to CGR 332 (J. Beebe, J. Daly)
M/S/U to maintain ENROLLMENT RESTRICTIONS for CGR 332 (C. Hudelson Putnam, J. Beebe)

V. UNFINISHED BUSINESS

Informational Items

1. Title 5 Compliance Progress  K. Walters Dunlap / B. Adams
   No report

2. CurricUNET Trainings  B. Adams
   a. Training scheduled
      February 26, 2009  FH 154  3:00 – 4:30
      March 12, 2009  FH 154  3:00 – 4:30
      March 26, 2009  FH 154  3:00 – 4:30

   B. Adams reported there were eight (8) attendees at the 2/26/09 CurricUNET training workshop.

VI. NEW BUSINESS

Action Items

1. CurricUNET Style Guide  J. Daly / D. Gilbert / B. Adams
   A style guide prepared by the English department was reviewed by the committee. Many issues were discussed which related to style and grammar in CurricUNET. The committee agreed it would be helpful to include the stylistic guide notes in the help functions of CurricUNET.

2. LIBR Prefix  K. Ennis / B. Adams
   MISU to approve the new LIBR prefix which will replace the LR prefix when course outlines are brought through CurricUNET in Fall. (M. Lynch/J. Monast)

Information Items

1. End of year review session  B. Adams
   a. April 14
   b. Pizza and soda provided

2. Catalog Production  L. Senechal / B. Adams
   L. Senechal reported that the catalog went to the presses on Friday, February 27th, after proofs were reviewed. Counseling has been filing numerous complaints about the catalog to the Office of Instruction. T. White reported that
counselors have forwarded complaints to him. L. Senechal said that errors are the result of the manual update process (unlike the Schedule of Classes) and that CurricUNET is not ready to automate reporting. She shared that B. Adams may bring the catalog earlier in the year as an agenda item for Curriculum Representatives to bring back to their divisions for close review. When CurricUNET is fully functional, this issue will be largely resolved. S. Agostini reminded the committee that catalog errors are not unique to the present—that the catalog has been filled with errors for years.

VII. TASK FORCES

1. Special Topics, Experimental, Independent, Work-Experience Task Force
   B. Adams
   
   No report

2. CurricUNET Implementation Task Force Update
   B. Sanders / B. Adams
   B. Adams informed the committee that many of the issues had been repaired by CurricUNET staff. Concerns were expressed about representatives’ ability to make changes after launching a course. B. Adams reported that the implementation team followed the CurricUNET recommendation to configure it that way because other campuses reported problems with representatives making changes after authoring. Many suggestions were made as to how to incorporate the work of the English department, including online help screens, manual, and trainings.

VIII. PUBLIC COMMENT
AGM 222 - Compact Power Equipment Repair

Action Type: Course Inactivation

Effective:

Primary Author: Todd Conrado

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: 
State Classification: 
Open Entry/Open Exit: No Work Experience: Occupational

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGM-222</td>
<td>Lecture</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>AGM-222</td>
<td>Lab</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>AGM-222</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>54</td>
<td>15%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
Modesto Junior College
AGM 222 Course Outline
Effective Date: 05/01/2007
Printed On: 2/9/2007 9:40:06 AM

I. COURSE OVERVIEW

The following information is what will appear in the .

AGM 222 - Compact Power Equipment Repair 1 Unit(s)

Emphasis placed on advancement of skills learned in Small Engine Repair. Students will gain practical and "hands-on" experience in compact equipment repair.
May be completed up to 2 times. A-F Only. Applicable to the Associate Degree. Transfer to CSU.

II. LEARNING CONTEXT

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in section III: Desired Learning.

1. COURSE CONTENT

A. REQUIRED

1. Fuel system service
2. Ignitions system service
3. Engine inspection, and cylinder reconditioning
4. Piston and piston ring service
5. Rod, bearing, crankshaft, valve, and camshaft service
6. Lawn equipment
7. Compact tractors

2. ENROLLMENT RESTRICTIONS

None

3. HOURS OF INSTRUCTION PER TERM

<table>
<thead>
<tr>
<th>Prorated Hours and Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>TYPE of HOURS</strong></td>
</tr>
<tr>
<td>Lab/Studio/Activity</td>
</tr>
<tr>
<td><strong>Total Units Earned:</strong></td>
</tr>
</tbody>
</table>
4. TYPICAL METHODS OF INSTRUCTION

Instructors of this course might conduct the course using the following methods:

Face-to-face education -

1. Lecture
2. Discussion
3. Demonstration
4. Supervised practice

5. TYPICAL ASSIGNMENTS

A. Quality: Assignments require the appropriate level of critical thinking

1. Complete weekly reading assignments that average two hours per week.
2. Complete weekly written assignments.
3. Each student will be given a specific engine component failure, must use their advanced knowledge of engines and their systems to correctly diagnose and repair the given situation.

B. Quantity: Hours spent on assignments in addition to hours of instruction (lecture hours)

1. Students will have weekly reading assignments as well as weekly quizzes. Students will also be required to turn in lab work orders, part order forms, lab write-ups, and scenario conclusions after each lab.

6. TEXTS AND OTHER READINGS

A. Required Texts: Small Gas Engines, 7 Edition, Alfred C Roth, 2004

B. Other reading material: Appropriate repair manuals

III. DESIRED LEARNING

A. COURSE GOAL

As a result of satisfactory completion of this course, the student should be prepared to:
1. Improve skills learned in small engine repair. Students will gain practical and "hands-on" experience in compact equipment repair.

**B. STUDENT LEARNING GOALS**

Mastery of the following learning goals will enable the student to achieve the overall course goal.

**REQUIRED LEARNING GOALS**

Upon satisfactory completion of this course, the student will be able to:

First completion:


Second completion:


2. Complete cost analysis for an engine problem.

**RECOMMENDED LEARNING GOALS**

Upon satisfactory completion of this course (when the related recommended content is covered), the student will be able to:

1. Given an advanced set of engine problems, the student will successfully diagnose and repair the engine to industry standards.

**IV. METHODS OF MEASURING STUDENT PROGRESS**

**A. FORMATIVE ASSESSMENT:**

1. Weekly quizzes
2. Weekly lab work to include work orders, repair procedures, and parts lists.
B. SUMMATIVE ASSESSMENT:

1. Midterm
2. Final
3. Term Projects
Proposal Impact

AGM 222 Compact Power Equipment Repair
**Course Inactivation**
Todd Conrado

Courses

Cross Listed Courses

Programs

1. Landscape and Park Maintenance Certificate of Achievement *New Program*
2. Landscape and Park Maintenance Certificate of Achievement *New Program*
3. Nursery Production Certificate of Achievement *New Program*
4. Recreational Land Management A.S. Degree *New Program*
AUBDY 304 - Automotive Collision Repair 4  
Action Type: Course Inactivation  
4 Units

Effective:
Primary Author: Jeff Beebe
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action
Course no longer needed due to program consolidation.

Transfer and GE Status

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification:
Open Entry/Open Exit: No Work Experience: Not Defined

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY-304</td>
<td>Lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUBDY-304</td>
<td>Lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUBDY-304</td>
<td>Disc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>0</strong></td>
<td><strong>0</strong></td>
<td><strong>0%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories
Prerequisite: AUBDY 303
I. DIVISION: Agriculture, Environmental Sciences & Technical Education      DIV./DEPT. NO: 73-4000
PREFIX/NO.: AUBDY 304      COURSE TITLE: Automotive Collision Repair 4
Formerly listed as:                                                                 Date Changed: 

II. ALSO OFFERED AS:
Div: Prefix/No.: Title:
Div: Prefix/No.: Title:

III. COURSE INFORMATION:
Units: 4 or Variable Units: X=1/2 unit A=1 unit B=2 units C=3 units D=4 units
Total Hours: Lecture: 18 Lab: 162 Other: 
Explain Other hours: 
Transfer Credit: CSU – UC – CAN – 
General Ed: AA/AS Area: CSU GE Area: IGETC Area: 
Offered Only: Fall – Spring – Summer – Eve – Not offered every semester – 

IV. PREREQUISITE(S)/COREQUISITE(S)/RECOMMENDED FOR SUCCESS:
(Please check all that apply and list below. Also attach appropriate documentation forms)
Prerequisite (P) – Corequisite (C) – Recommended for Success (R) – Limitation on Enrollment (L) –
Successful completion of AUBDY 303

V. CATALOG DESCRIPTION:
Comprehensive body repairs including, automobile rebuilding, unitized body alignment, fundamentals of frame repair, damage estimating, and shop management.

VI. FIELD TRIPS REQUIRED? Yes No Maybe 

VII. GRADING: A-F Only CR/NC Only CR/NC Option Non-Graded
VIII. REPEAT PROCEDURES: Credit: No *Yes Maximum Completions: Maximum Units: 
Non-Credit: No Yes Maximum Completions: 
*(If course is repeatable, attach a memo with the appropriate justification )

IX. EXPLAIN FEE REQUIRED: Materials fee required.

Safety Glasses
X. PREREQUISITE SKILLS
Before entering the course, the student will be able to:

1. Observe and practice all safety regulations involved in the use of heavy collision repair equipment.
2. List the different types of heavy pull equipment and compare accuracy and effectiveness of each.
3. Inspect collision damage, classify damaged area, and list in sequence a proper repair plan.
4. Identify the body parts on a conventional body and on a unitized automobile, and compare instruction differences.
5. Given a diagram of a unitized automobile, locate and name the HSS to HSLA (High Strength Low Alloy) parts.
6. State the safe heat range “in degrees” of the HSS and HSLA steel for domestic and import cars.
7. Select all tools and equipment and remove and replace a welded body panel on a repair project.
8. Determine the glass type, list steps (in sequence); remove and replace a windshield or back glass.
9. Identify types of upholstery and trim, and compare installation procedures.
10. Identify and list steps in sequence to remove and replace door parts in a vehicle.
11. Set up, adjust, and weld 20-24 gauge sheet metal with the MIG welder.

XI. OBJECTIVES (Expected outcomes for students)
Upon successful completion of the course, the student will be able to:

1. Observe and practice all safety regulations involved in the use of heavy collision repair equipment.
2. Correctly list the basic misalignment conditions for both framed type cars and for unitized body automobiles.
3. Identify each frame misalignment condition, and list in sequence the proper repair procedure.
4. Demonstrate knowledge of the self-centering frame gauges to diagnose automobile damage and complete analysis sheets.
5. Complete repair worksheets indicating all holds, blocking and pull directions using the analysis sheet as a guide.
6. Evaluate all corrected misaligned areas by comparing manual specifications at each reference point.
7. Demonstrate an ability to diagnose damage and record information on lab analysis sheets using the electronic computer measuring system.
8. Complete a repair estimate of a severely damaged automobile using the collision repair manuals. The estimate must include all current information and qualify as a fair and valid estimate according to industry standards.
9. Complete one or more frames or unitized body repairs utilizing the frame repair rack.
10. Evaluate each completed repair by a visual inspection and compare the quality and workmanship to those of the industry.

XII. CONTENT
A. Heavy collision repair equipment
   1. Pull-post method
      a. Floor anchors
      b. Spacing and pattern
   2. Frame and unitized drive-on racks
      a. Electronic computer measuring system
B. Frame and unitized body alignment

1. Types of frames
   a. Perimeter
   b. X-type
   c. Ladder
   d. Bolt on steel
   e. Platform
   f. Unitized

2. Body sections and assemblies Pull-post method
   a. Types of steel used
      i. Location sub-frames, frames, and reinforcements
      ii. Safety factors involved in the repairs

3. Types of frame damage and unitized damage
   a. Kick-up
   b. Sag
   c. Sideway
   d. Mask and buckle
   e. Twist
   f. Diamond

C. Frame Damage Analysis

1. Frame gauges
   a. Methods of attaching
   b. Attaching points
   c. Sighting and reading the gauges
   d. Completing an accurate analysis sheet
   e. Checking for diamond and twist
   f. Tram and tracking gauges
   g. Strut tower gauge
   h. Attaching laser targets

4. Frame repair methods
   1. Formulating the repair plan
   2. Anchoring and holding
   3. Preventing additional damage
   4. Corrective pull, method of attaching, importance of pull direction
   5. Importance of correctional sequence

5. Critical measurements
   1. Frame and unitized data (published manuals)
   2. Establishing a datum line
   3. Rail length, width and height
4. Checking wheel base and tracking
5. The effects of misalignment on other components
6. Establishing a body O line

F. Front-end geometry and alignment
   1. Types of suspensions
   2. Conventional upper and lower control arms (adjustments)
   3. McPherson Struts (Camber only)
   4. Adjustments: front wheel drive/rear wheel drive

G. Estimating body and frame damage
   1. Appraisal procedures
   2. Filling out the estimate form
   3. Legal aspect of a valid appraisal
   4. Contents of an appraisal and its use
   5. Collision dynamics
      a. Law of motion
      b. Momentum
      c. Weight and speed
      d. Angle of impact
      e. Primary impact
      f. Secondary impact
      g. Center of gravity
   6. The effects of force on shape
      a. Direct damage
      b. Indirect damage
      c. Work-hardening
      d. Structural misalignment
   7. Appraisal manuals and labor costs
      a. Flat rate time
      b. Open time
      c. Estimated time
      d. Straight time
      e. Overlap time
      f. Parts number and costs
      g. Sublet repairs
H. Front-end geometry and alignment
   1. Types of suspensions
   2. Conventional upper and lower control arms (adjustments)
   3. McPherson Struts (Camber only)
   4. Adjustments: front wheel drive/rear wheel drive
I. Estimating body and frame damage
   1. Appraisal procedures
   2. Filling out the estimate form
   3. Legal aspect of a valid appraisal
   4. Contents of an appraisal and its use
   5. Collision dynamics
      a. Law of motion
      b. Momentum
      c. Weight and speed
      d. Angle of impact
      e. Primary impact
      f. Secondary impact
      g. Center of gravity
   6. The effects of force on shape
      e. Direct damage
      f. Indirect damage
      g. Work-hardening
      h. Structural misalignment
   7. Appraisal manuals and labor costs
      h. Flat rate time
      i. Open time
      j. Estimated time
      k. Straight time
      l. Overlap time
      m. Parts number and costs
      n. Sublet repairs
XIII. TEACHING METHODS
A. Methods to achieve course objectives:
   1. Related material will be presented in the classroom with the use of videotapes, slides, transparencies, and information and procedure sheets.
   2. Students will demonstrate subject understanding by writing summaries, outlines and sequential procedures obtained from the text and service manuals.
   3. Students will participate in class discussions, and present their own personal views on problem solving procedures.

B. Typical assignments used in achieving learner independence and critical thinking:
   1. Each student must write a summary on each completed lab project and compare it to industry standards.
   2. It is the responsibility of each student to list the alternative and select the method for correcting problems encountered on lab repair projects.
   3. Each student is required to compare misaligned frames and sub-sections with factory specifications before any corrections are made.
   4. Students are required to complete a detailed estimate using collision repair manuals, listing parts’ prices, labor costs and repair hours on all sever damages.

XIV. TEXTBOOKS AND OTHER READINGS (Typical)
A. Required texts:

B. Other readings:

XV. SPECIAL STUDENT MATERIALS (i.e., protective eyewear, aprons, etc.)
Safety glasses are required. Coveralls and earmuffs are recommended.

XVI. METHODS OF EVALUATING STUDENT PROGRESS
1. Class and group participation.
2. Class presentation.
3. Written examinations, procedure formulation and essays.
4. Problem solving tasks, both written and manipulative.
5. Performance ratings, using industry procedures, and standards as guidelines.
Proposal Impact

AUBDY 304 Automotive Collision Repair 4
**Course Inactivation**
Jeff Beebe

Courses

Cross Listed Courses

Programs

1. Autobody/Collision Repair Certificate of Achievement *Certificate Major Revision*
2. Autobody/Collision Repair Certificate of Achievement *New Program*
Modesto Junior College
AUBDY 351 Course Data Summary Report

AUBDY 351 - Auto Body Collision Repair 1
Action Type: Course Inactivation
Effective:
Primary Author: Jeff Beebe
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action
No longer taught.

Transfer and GE Status

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification:
Open Entry/Open Exit: No Work Experience: Not Defined

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY-351</td>
<td>Lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUBDY-351</td>
<td>Lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUBDY-351</td>
<td>Disc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
AA/AS Degree ☒  MODESTO JUNIOR COLLEGE  Date Originally Submitted: 
Non-Degree ☐  COURSE OUTLINE  Date Updated: 12/9/2002
Noncredit ☐

I. DIVISION: Agriculture, Environmental Sciences & Technical Education DIV./DEPT. NO: 73-4000
PREFIX/NO.: AUBDY 351 COURSE TITLE: Auto Body Collision Repair 1

Formerly listed as:  Date Changed: 

II. ALSO OFFERED AS:

Div:  Prefix/No.:  Title:
Div:  Prefix/No.:  Title:

III. COURSE INFORMATION:

Units: 2 or  Variable Units:  X=1/2 unit  A=1 unit  B=2 units  C=3 units  D=4 units
Total Hours:  Lecture: 27  Lab: 27  Other: 

Explain Other hours:  

Transfer Credit:  CSU –  UC –  CAN – 
General Ed:  AA/AS Area:  CSU GE Area:  IGETC Area: 

Offered Only:  Fall –  Spring –  Summer –  Eve –  Not offered every semester –

IV. PREREQUISITE(S)/COREQUISITE(S)/RECOMMENDED FOR SUCCESS:

(Please check all that apply and list below. Also attach appropriate documentation forms)
Prerequisite (P) –  Corequisite (C) –  Recommended for Success (R) –  Limitation on Enrollment (L) –

V. CATALOG DESCRIPTION:

For beginning students in auto body collision work. Theory and study of the body sheet metal and structure. Theory and manipulative skills in oxy-acet welding, sheet metal straightening, plastic filling and shrinking.

VI. FIELD TRIPS REQUIRED?  Yes ☐  No ☒  Maybe ☐

VII. GRADING:  A-F Only ☒  CR/NC Only ☐  CR/NC Option ☐  Non-Graded ☐

VIII. REPEAT PROCEDURES:  Credit: No ☒  *Yes ☐  Maximum Completions:  Maximum Units: 
Non-Credit: No ☒  Yes ☐  Maximum Completions: 

*(If course is repeatable, attach a memo with the appropriate justification)

IX. EXPLAIN FEE REQUIRED:  Materials fee required.

Curriculum Committee Agenda  Page 21  March 17, 2009
AUBDY 351 Auto Body Collision Repair 1

X. **PREREQUISITE SKILLS**
   Before entering the course, the student will be able to:

XI. **OBJECTIVES** (Expected outcomes for students)
   Upon successful completion of the course, the student will be able to:

   1. Identify and initiate safety practices pertaining to the use of chemicals and equipment.
   2. Match the various type of sheet metal welding methods to the appropriate application.
   3. Practice basic metal repair, also able to correlate damage characteristics with repair procedure.
   5. Formulate and produce the proper mixture of body fillers for a given situation to determine knowledge of the subject.
   6. Distinguish between different body construction types and be able to identify them.

XII. **CONTENT**

A. Safety
   1. Chemical
   2. Electrical
   3. Grinding
   4. Gas fumes
   5. Combustable fuses
   6. Welding
   7. Floor jacks, jack stands

B. Welding and Cutting
   1. Acetylene welding
   2. Torch cutting
   3. Brazing sheet metal
   4. Typical welding jobs

C. Basic metal bumping repairs
   1. Visual damage inspection
   2. Proper tool repair plan
   3. Analysis of damage

* = Multi-cultural objective or content item

Rev 5/2002

Curriculum Committee Agenda

Page 22

March 17, 2009
D. Heat Shrinking
   1. Stretched metal
   2. Locating high spots
   3. Heat application
   4. Hammering (upset)
   5. Quenching

E. Plastic Body Fillers
   1. Chemical
   2. Mixing
   3. Cut down
   4. Sanding
   5. Contour

F. Body Construction
   1. Crown and strength of sheet metal
   2. Basic body shapes and reinforcements
   3. High strength steel
   4. Fastening devices, moldings and clips

G. Hand Tools
   1. Hammers
   2. Dolly blocks
   3. Vixen body files
   4. Body spoons
   5. File boards
   6. Screwdriver
   7. Wrenches
   8. Grinder
   9. Drills
   10. Pneumatic sander (dual-action)
XIII. TEACHING METHODS

A. Methods to achieve course objectives:
   1. Appropriate material will be presented by relating various experiences and knowledge by means of lecture and lab demonstration.
   2. Study sheets are used to test key facts shown in film strips, videos, or movies.
   3. Student will perform manipulative skills test to demonstrate the mastery of certain skills.
   4. Individual assistance and observation is given during lab projects on individual work.
   5. Students are given individual jobs directly relating to what they have just been taught in lecture and are asked to perform various tasks.

B. Typical assignments used in achieving learner independence and critical thinking:
   1. Each student is required to analyze a damage, and select a repair plan.
   2. Each student is assigned a collision repair task, in which the student will select tools and equipment, provide a sequence of operations and complete the repairs.
   3. Students will provide a written critique sheet with each completed project, reflecting the quality, speed and accuracy of that repair.

XIV. TEXTBOOKS AND OTHER READINGS (Typical)

A. Required texts:
   Principles of Auto Body Repairing and Repainting, Prentice-Hall, Inc., Deroche
   Professional Automotive Collision Repair, 2nd Edition, Delmar Thompson Learning, James E. Duffy

B. Other readings:

XV. SPECIAL STUDENT MATERIALS (i.e., protective eyewear, aprons, etc.)

None

XVI. METHODS OF EVALUATING STUDENT PROGRESS

1. Class attendance and work habits (presentation)
2. Chapter exam
3. Manipulative skills
4. Task performance ratings by industrial standards
5. Projects are inspected and evaluated
6. Essay exam
Proposal Impact

AUBDY 351 Auto Body Collision Repair 1
**Course Inactivation**
Jeff Beebe

Courses

1. AUBDY 322 *Active*
2. AUBDY 352 *Active*
3. AUBDY 352 *Launched*

Cross Listed Courses

Programs

1. Autobody/Refinishing null *New Program*
AUBDY 352 - Auto Body Collision Repair 2

Action Type: Course Inactivation

Effective:

Primary Author: Jeff Beebe

Other Author(s):

CC Representative Approval By:

CC Staff Review By:

Division Dean Approval By:

Rationale for Course Action

No longer taught

Transfer and GE Status

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: : State Classification: I
Open Entry/Open Exit: No Work Experience: Not Defined

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY-352</td>
<td>Lecture</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUBDY-352</td>
<td>Lab</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>AUBDY-352</td>
<td>Disc</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>0</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories

Prerequisite: AUBDY 351
I. Division: Family & Consumer Sciences/Technical Ed. Div./Dept. No. 73-4000

Course
Prefix #: AUBDY 352 Title: Auto Body Collision Repair 2

Formerly listed as: ________________ Changed: ________________

Hours/Week: Lecture: 1.5 Lab: 1.5 Other: ___ If catalog is to % Load: .075 % Load: .075 % Load: ___ read lecture/lab check here

Other (explain):
_________________________________________________________________________

II. Also offered as: Division:

__________________________________________

Course
Prefix, No._________ Title:

III. Course Information:

No. Weeks: 18 TOP: 0948.20 Study: ____ In-Service: ____
Method of Units: 2 SAM: B TV: ____ Apprentice: ___
Instruction Tot % Load: .150 CAN: ____ Wk/Ex: ____ State Class: I 30

Check if applicable: Offered Only: ___Spring ___Summer ___Fall X Eve
Not offered every semester ___

IV. Prerequisite(s)/Recommended For Success/Concurrent Enrollment:

Prerequisite(s): AUBDY 351
(Form A, B, or C must be attached.)
Recommended For Success:

__________________________________________
(Form A must be attached.)

I Concurrent Enrollment: ____________________________ X Req.
___ Rec.
(Form A, B, or C must be attached.)
V. Catalog Description: Trips required?
Continued development of skills competence in metal straightening through individual project work. Student ___
Yes must supply own project, and it must meet instructor's approval. Study of theory, equipment and manipulative ___
No techniques in MIG welding and spray refinishing, up to and including surface preparation and priming. (No complete ----
Maybe or spot color repairs are allowed in evening classes without instructor's approval.)

VII. Grading: VIII. Repeat Credit Non-Credit
Credit procedures:
X  A-F Only (GR)  X  No  ____  No
____ CR/NC Only  ____  Yes, for  ____  Yes,
for ____ CR/NC Option  ____  Max. Completions  ____
Maximum ____  No Grades  ____  Max. Units
Completions

IX. Explain any permissible fee required:
   Materials fee required.

**PLEASE REFER TO THE CURRICULUM MANUAL IF CLARIFICATION IS NEEDED FOR ANY ITEM ON THE OUTLINE**

Rev 9/96

AUBDY 352, Auto Body Collision Repair 2

X. PREREQUISITE SKILLS
   Before entering the course, the student should be able to:

XI. OBJECTIVES (Expected outcomes for students)
   Upon completion of the course, the student should be able to:

   A. Distinguish between the various attachments used for hydraulic equipment and propose a procedure for restructuring damaged metal.
   Show proper care and maintenance of equipment
   B. Demonstrate a knowledge of the proper powers tool to employ
for various repairs and be able to skillfully and safely utilize them.

C. Calculate the correct solder, composition and produce it to the plastic state. Recognizing that the surface is prepared and ready to accept solder. Show skill in paddling to contour techniques. Recognize the proper finish achieved by neutralizing acids and catalyst hardener for a given situation to determine knowledge of the subject. Employ proper safety throughout procedure.

D. Formulate and produce the proper mixture of polyester resin and catalyst hardener for a given situation to determine knowledge of the subject. Employ proper safety throughout procedure.

E. Appraise the cause of misalignment and conclude the proper procedures and special tools needed for reconstruction.

F. Relate proper practice of safety knowledge in respect to all areas of hazard.

XII. CONTENT

Progressive training in collision repair by using hydraulic porto-power equipment for various technical skills. Learn to analyze damage and determine the proper procedure and tools used to reconstruct it.

A. Hydraulic Porto-Power Equipment
   1. Pump and ram
   2. Hose and quick - coupler
   3. Attachments
   4. Push arrangements
   5. Proper positioning for use
   6. Care and maintenance

B. Machine and Power Tools
   1. Body grinder (portable air)
   2. Grinder (stationary)
   3. Pneumatic panel cutter
   4. Pneumatic grinder (portable)
   5. Pneumatic sander (dual-action)
   6. Pneumatic cut off disc.

C. Solder Filling
   1. Body solder composition
   2. Range of plastic state
   3. Timing and application
   4. Paddling to contour
   5. Grinding and filing to contour
   6. Neutralizing acids

D. Fiberglass Repair
1. Types of materials
2. Panel replacement
3. Panel sectioning

AUBDY 352

4. Bonding strip
5. Surfacing
6. Safety procedures

E. Adjustments
1. Design and construction
2. Visual inspection, cause of misalignment; correction
3. Procedures, techniques and attachment locations
4. Shims, stops, gap and contour alignment
5. Special tools

F. Safety
1. Car jacks, blocking, hoisting when dismantling
2. Air pressure
3. Acids
4. Combustable gas
5. Power tools
6. Gas fumes

XIII. TEACHING METHODS

A. Methods used in achieving course objectives:
1. Study sheets are used to test key facts shown in film strips,
   videos or movies
2. Appropriate material will be presented by relating various experience and knowledge by means of lecture and lab demonstration
3. Student will perform manipulative skills test to demonstrate the mastery of certain skills
4. Students are given individual job directly relating to what they have just been taught in lecture and are asked to perform various tasks
5. Individual assistance and observation is given during lab project on individual work

B. Methods used in achieving learner independence and critical thinking:
1. Upon completion of outside technical reading, the student will develop a written procedure for repairing specified damage.

2. Technical reference manuals will be consulted to ascertain appropriate compound/element mixtures to conduct solder and fiberglass repairs.

XIV. TEXTBOOKS (typical)
None

XV. SPECIAL STUDENT MATERIALS (i.e., protective eyewear, aprons, etc.)
None

XVI. METHODS OF EVALUATION
A. Class attendance and work habits (presentation)
B. Chapter exam
C. Manipulative skills
D. Task performance rating by industrial standards
E. Projects are inspected and evaluated
F. Essay exam
Proposal Impact

AUBDY 352 Auto Body Collision Repair 2
**Course Inactivation**
Jeff Beebe

Courses

Cross Listed Courses

Programs
I. DIVISION: Arts, Humanities & Communications

PREFIX/NO.: MUSA 155 COURSE TITLE: Vocal Master Class

Formerly listed as: __________________________ Date Changed: __________

II. ALSO OFFERED AS:

Div: ______________ Prefix/No.: __________ Title: __________________________

Div: ______________ Prefix/No.: __________ Title: __________________________

III. COURSE INFORMATION:

Units: 1 or Variable Units: □ X=1/2 unit □ A=1 unit □ B=2 units □ C=3 units □ D=4 units

Explain Other hours: __________________________

Transfer Credit: CSU – □ UC – □ CAN – ______

General Ed: __ AA/AS Area: Activities CSU GE Area: __ IGETC Area: __

Offered Only: Fall – □ Spring – □ Summer – □ Eve – □ Not offered every semester – □

IV. PREREQUISITE(S)/COREQUISITE(S)/RECOMMENDED FOR SUCCESS:

(Please check all that apply and list below. Also attach appropriate documentation forms)

Prerequisite (P) – □ Corequisite (C) – □ Recommended for Success (R) – □ Limitation on Enrollment (L) – □

Concurrent enrollment in MUSA 153 or MUSA 154

V. CATALOG DESCRIPTION:

Development of vocal performance through the consideration and application of good vocal technique, performance practice and dramatic character development; principles applied through recital attendance and through solo, duet or ensemble performances in class and public recitals.

VI. FIELD TRIPS REQUIRED? Yes □ No □ Maybe □

VII. GRADING: A-F Only □ CR/NC Only □ CR/NC Option □ Non-Graded □

VIII. REPEAT PROCEDURES: Credit: No □ *Yes □ Maximum Completions: 4 □ Maximum Units: 4 □

Non-Credit: No □ Yes □ Maximum Completions: ______

*(If course is repeatable ,attach a memo with the appropriate justification ) (see justification on CAR form)

IX. EXPLAIN FEE REQUIRED: __________________________
MUSA 155   Vocal Master Class

X.  **PREREQUISITE SKILLS**
Before entering the course, the student will be able to:

XI.  **OBJECTIVES** (Expected outcomes for students)
Upon successful completion of the course, the student will be able to:

A. Identify and perform accurately the performance style of various time periods in western music*
B. Clearly define, describe and identify the musical characteristics of composers from various countries and time periods in Western music*
C. Clearly define, describe and identify various musical genres from Western music*
D. Demonstrate the ability to dramatically interpret their chosen literature*
E. Critique other performers for style, vocal technique and dramatic interpretation*
F. Translate and correctly pronounce songs from various languages*

XII.  **CONTENT**

A. Vocal technique
B. Research skills
C. Style, genre and performance practice*
D. Character development*
E. Foreign language diction and translation*
F. In class application of the above through individual performances by students
G. Application of the above through public solo, duet and ensemble performances
H. Application of the above through public class recitals and joint recitals

XIII.  **TEACHING METHODS**

A. Methods to achieve course objectives:
1. The teacher will lecture on vocal pedagogy, genres and performance practice of the various time periods in Western Art and Folk music from countries such as Italy, Germany, Spain, Mexico, France, England, Russia and the United States
2. Lectures on character development
3. Small and large group coaching
4. Demonstration of appropriate voice technique, style and character through the performance of live and recorded (audio and/or visual) music

B. Typical assignments used in achieving learner independence and critical thinking:
1. Assignments requiring analysis of songs to determine proper performance goals
2. Assignments requiring independent practice of analyzed scores to achieve performance goals
3. Critical analysis of fellow classmates’ performances
4. Assignments requiring analysis of various levels of performers (pre-high school, high school, college, and professional levels)
5. Assignments requiring the development and analysis of dramatic character
6. Assignments requiring the translation and correct pronunciation of languages to be studied

XIV. TEXTBOOKS AND OTHER READINGS (Typical)

A. Required texts:

B. Other readings:
Each student will be assigned vocal literature, and thus each student will need to purchase different books. The students will be using the library, listening lab and the internet for research in this class. Various readings and suggested books for purchase will be assigned to each student depending on their individual needs.

XV. SPECIAL STUDENT MATERIALS (i.e., protective eyewear, aprons, etc.)

XVI. METHODS OF EVALUATING STUDENT PROGRESS

A. Assessment of musical skills based on daily performance, mid term performances and recitals
B. Written analysis by student of diverse performances
C. Research assignments outlining style, genre and character development
Memo To: Curriculum Committee  
From: Cherrie Llewellyn  
Date: February 18, 2009  
Subject: Request, expedited approval of co-requisite

Because of an untraceable string of events, my MUSA 155, Master Class (formerly MUSIC 139), is listed in the catalogue and in our bulletins correctly, which is one must be in a voice class in order to take Master Class. However, somehow this co-requisite is missing in the curriculum paper work and this omission was just recently discovered.

Following is the written rationale for the reasons why a student must be enrolled in a voice class in order to take MUSA 155. I am requesting an expedited approval of a co-requisite.

Master class (MUSA 155) is an extension of our vocal repertoire classes. Students are learning and perfecting songs in their voice class but need a performance venue and exposure to various levels of performances and exposure to the various voice types. Master Class is both a performance venue and a chance to teach students how to be vocal teachers (learning vocal pedagogy by application). The students are able to critique and be critiqued in this setting. Students also participate in specialized workshops each week and participate in mock auditions. This class provides a deeper application of what they learn in their voice lessons, learning not only historical perspective, but also performance perspectives and how to locate vocal problems and give examples of exercises and techniques to improve perceived problems. In order to accomplish this all students in the master class must be in voice lessons and currently working on musical literature, this vocal literature is then required because it is used in MUSA 155 so that they can perform these works which are in progress throughout the semester and then present the end product through performance at the end of the semester. Without the literature that they are learning in the voice classes the student would have nothing to perform in master class. (This is not a class that the student sings tunes off the radio ☹, it is not American Idol, nor do the students have the adequate background and ability to teach themselves pieces at this level to bring into the class.)
Modesto Junior College
AGEC 210 Course Data Summary Report

AGEC 210 - Elements of Agricultural Economics
Action Type: Course Revision Major
Effective:
Primary Author: Marlies Boyd
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status
CSU Transfer: Requested
UC Transfer: Requested
CSU-GE Category: CSU-GE - D2 Requested

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: I
Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>AGEC-210</td>
<td>Lecture</td>
<td>36.00</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>AGEC-210</td>
<td>Lab</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>AGEC-210</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>90</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
I. OVERVIEW

The following information will appear in the 2009 - 2010 catalog

**AGEC-210 Elements of Agricultural Economics**

*Advisory:* Before enrolling in this course, students are strongly advised to be enrolled in or have satisfactorily completed MATH 70.

The place of agriculture and agri-business in the economic system; basic economic concepts, and problems of agriculture; supply and marketing problems, factors of production; state and federal agriculture programs affecting agriculture's economic position. Field trips are required. Course is applicable to the associate degree. General Education:

CSU-GE - D2

II. LEARNING CONTEXT

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

   A. California Agriculture
      1. Economic significance
      2. Central Valley
      3. Issues affecting agriculture

   B. The Nature of Agriculture Economics
      1. Definition
      2. Relationship to other sciences
      3. Using indexes

   C. Agricultural Productivity
      1. History
      2. Current status
      3. Factors affecting productivity
      4. Major economic systems

   D. Consumer Behavior and Demand
      1. Basic choices
      2. Problems of society
      3. Law of Demand
      4. Factors affecting demand
      5. Elasticity

   E. Production Calculations
      1. The Production Function
      2. Derivatives
      3. Stages of production
      4. Cost calculations
      5. Cost analysis

   F. Supply and Markets
      1. Supply and demand interaction
      3. Factors affecting market supply
      4. Types of market structure
5. Cooperatives and their function

G. Competition and the Market
1. Pure competition
2. Imperfect competition
3. Oligopoly/Monopoly
4. Anti-trust laws/agricultural bargaining

H. Governmental Policy Affecting Agriculture
1. Price instability and over production
2. Price supports and subsidies
3. Free Trade vs. Protectionism
4. The Farm Bill

2. Required Lab Content:

1. Accessing Agricultural Economics Information
   A. Library Tour
   B. Library Assignment

2. Law of Diminishing Marginal Utility
   A. Calculating DMU
   B. Calculating total utility
   C. Graphing

3. Law of Demand
   A. Wheat market activity
   B. Deriving a demand curve
   C. Identifying market price
   D. Factors affecting the market

4. Elasticity
   A. Elasticity coefficients
   B. Application

5. Production Functions & Costs
   A. Graphing
   B. Analysis
   C. Derivatives

6. Law of Supply
   A. Graphing
   B. Factors affecting
   C. Almond market
   D. Dairy Industry

7. Market Structure
   A. Imperfect competition
   B. Product characteristics
   C. Product design
   D. Presentation

3. Recommended Content:

I. Current Issues
   1. Water
   2. Laws and Regulations
   3. Ag Labor
   4. Trade Restrictions
   5. Foreign Policy
B. **ENROLLMENT RESTRICTIONS**

1. **Advisories**

   Before enrolling in this course, students are strongly advised to be enrolled in or have satisfactorily completed MATH 70.

C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>36.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Lab</td>
<td>54.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3 Units

D. **METHODS OF INSTRUCTION (TYPICAL)**

Instructors of the course might conduct the course using the following method:

1. Lecture on course material.
2. Discussion of current topics.
3. Guest speakers on economic topics.
4. Field trips to local agri-businesses.

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   1. Weekly chapter reading assignments.
   2. Preparation and study for weekly quizzes.
   3. Preparation of weekly laboratory reports.
   5. Preparation of field trip reports - 3 per term.

2. **EVIDENCE OF CRITICAL THINKING**

   *Assignments require the appropriate level of critical thinking*

   1. Explain the economic importance of California Agriculture. Include statistical information and facts.
   2. Calculate MPP and APP for strawberry production. Graph the production function and the MPP and APP derivatives. Indicate the stages of production.

F. **TEXTS AND OTHER READINGS (TYPICAL)**


III. **DESIRED LEARNING**

A. **COURSE GOAL**

   *As a result of satisfactory completion of this course, the student should be prepared to:*

Explain basic economic concepts relating to supply and demand, production costs and functions, and describe the overall significance of agriculture in the global economy.

B. **STUDENT LEARNING GOALS**

*Mastery of the following learning goals will enable the student to achieve the overall course goal.*

1. **Required Learning Goals**

   *Upon satisfactory completion of this course, the student will be able to:*

   a. Compare and contrast the role of agriculture in the economic structure of the state, country and world.

   b. Define economic terms.

   c. Describe factors affecting consumer behavior and market demand.

   d. Given factors of production, graph a production function and identify the three stages of production.

   e. Analyze and discuss current legislation affecting agriculture.

   f. Compare and contrast major economic systems.

   g. Analyze and describe supply and demand graphs.

   h. Calculate costs, construct graphs using given data on cost factors and analyze costs.

   i. Explain various types of government policy as it relates to agricultural economics.

2. **Lab Learning Goals**

   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Locate information related to agricultural economics in the MJC library.

   b. Analyze data and construct graphs that demonstrate various economic laws.

   c. Develop a product or service that meets the considerations of an imperfectly competitive market.

   d. Discuss the economic importance, the major costs and revenue streams for local agricultural businesses such as a dairy or almond farm.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

A. **FORMATIVE ASSESSMENT**

   1. Written lab reports

   2. Chapter quizzes on assigned readings

   3. Field trips to local agribusinesses that include a 1-2 page summary write-up

B. **SUMMATIVE ASSESSMENT**

   1. Final Exam

   2. Laboratory Notebook
Proposal Impact

AGEC 210 Elements of Agricultural Economics
**Course Revision Major**
Marlies Boyd

Courses

Cross Listed Courses

Programs

1. Agricultural Science A.S. Degree *New Program*
2. Agriculture Business A.S. Degree *New Program*
3. Agriculture Laboratory Technician Certificate of Achievement *New Program*
4. Agriculture Laboratory Technician A.S. Degree *New Program*
5. Agriculture: Sales, Service A.S. Degree *New Program*
6. Agriculture: Sales, Service Technician Certificate of Achievement *New Program*
7. Animal Science A.S. Degree *New Program*
8. Commercial Floristry Technician Certificate of Achievement *New Program*
9. Crop Science A.S. Degree *New Program*
10. Dairy Industry A.S. Degree *New Program*
11. Dairy Science A.S. Degree *New Program*
12. Environmental Horticultural Science A.S. Degree *New Program*
13. Food Processing Certificate of Achievement *New Program*
14. Food Processing A.S. Degree *New Program*
15. Forestry A.S. Degree *New Program*
16. Forestry Certificate of Achievement *New Program*
17. Forestry A.S. Degree *New Program*
18. Forestry Certificate of Achievement *New Program*
19. Fruit Science A.S. Degree *New Program*
20. Fruit Science A.S. Degree *New Program*
21. Mechanized Agriculture A.S. Degree *New Program*
22. Nursery Production Certificate of Achievement *New Program*
23. Poultry Science A.S. Degree *New Program*
24. Recreational Land Management A.S. Degree *New Program*
25. Recreational Land Management Certificate of Achievement *New Program*
26. Soil Science A.S. Degree *New Program*
AUBDY 301 - Automotive Collision Repair 1
Action Type: Course Revision Minor
Effective:
Primary Author: Jeff Beebe
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: I
Open Entry/Open Exit: No  Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY-301</td>
<td>Lecture</td>
<td>36.00</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>AUBDY-301</td>
<td>Lab</td>
<td>162.00</td>
<td>45%</td>
<td></td>
</tr>
<tr>
<td>AUBDY-301</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>198</td>
<td>55%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight Screwdriver</td>
<td>1</td>
<td>$5</td>
</tr>
<tr>
<td>Phillips Screwdriver</td>
<td>1</td>
<td>$5</td>
</tr>
<tr>
<td>Putty Knife</td>
<td>1</td>
<td>$5</td>
</tr>
<tr>
<td>Combination Pliers</td>
<td>1</td>
<td>$7.5</td>
</tr>
<tr>
<td>6’ Flashlight</td>
<td>1</td>
<td>$5</td>
</tr>
<tr>
<td>Air Nozzle</td>
<td>1</td>
<td>$5</td>
</tr>
<tr>
<td>Cheese Grater</td>
<td>1</td>
<td>$3</td>
</tr>
<tr>
<td>Plastic Spreader</td>
<td>2</td>
<td>$2</td>
</tr>
<tr>
<td>4’ Sanding Block</td>
<td>1</td>
<td>$2.5</td>
</tr>
<tr>
<td>Safety Glasses</td>
<td>1</td>
<td>$5</td>
</tr>
</tbody>
</table>

These materials are related to the Student Learning Goals for the course because:

Students in the field need to acquire personal tools associated with the profession as they progress through program.

These items have continuing value because:

Tools and supplies have continued market value and can be used to conduct professional and or home auto body collision related tasks.

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Consistency in quality and accuracy of tools enables professors to ensure safety in labs, uniformity in work being performed by students and efficiency of labs work scheduled throughout the semester (minimize delays that impact student learning).

---

**Enrollment Restrictions & Advisories**

**Advisory:**
Modesto Junior College
Proposed Course Outline

AUBDY 301

I. **OVERVIEW**
The following information will appear in the 2009 - 2010 catalog

AUBDY-301 *Automotive Collision Repair 1* 5 Units

*Advisory:* Before enrolling in this course, students are strongly advised to be concurrently enrolled in AUBDY 321

*Materials Fee Required*

Introduction to automotive collision repair industry with emphasis on shop safety, careers, vehicle designs, welding techniques, non-structural steel repairs including straightening and replacement procedures. Field trips might be required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   A. Introduction to the Auto Body Collision Repair Industry
      1. History
      2. Careers
      3. Operations
      4. Facilities
   
   B. Safety
      1. Overall Shop Safety
      2. Personal Safety
      3. Tools and Machine
      4. Environmental
   
   C. Identifying and Selecting Proper Tool Usage
      1. Hand Tools
      2. Power Tools
      3. Measurements and Service Information
   
   D. Welding and Cutting
      1. Oxygen/Acetylene Heating and Cutting
      2. Metal Inert Gas Welding
   
   E. Vehicle Design (Construction)
      1. Identifying Substrates
      2. Fastening Devices.
   
   F. Non Structural Steel Repairs
      1. Damage Analysis
      2. Common Damage Characteristics
      3. Straightening Fundamentals
      4. Body Fillers

2. **Required Lab Content:**

   a. Demonstrate proper safety habits in a shop environment as it relates to
      
      i. Chemicals
ii. Electrical

iii. Surface Preparation

iv. Vehicle Lifts

b. Demonstrate Proper Tool Usage in lab work

c. Demonstrate appropriate usage of Welding and Cutting Techniques
   i. Metal Inert Gas Welding
   ii. Spot Welding
   iii. Heat Shrinking Processes

d. Perform Non Structural Repairs
   i. Damage analysis
   ii. Common damage characteristics
   iii. Removal and Replacement of Non-Structural Panels

e. Apply Automotive Body Fillers to industry standards

f. Determine Vehicle Design (Construction) as it applies to lab projects
   i. Identifying Substrates
   ii. Fastening Devices

B. ENROLLMENT RESTRICTIONS

1. Advisories

   Before enrolling in this course, students are strongly advised to be concurrently enrolled in AUBDY 321

C. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>36.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Lab</td>
<td>162.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. METHODS OF INSTRUCTION (TYPICAL)

   Instructors of the course might conduct the course using the following method:

   1. Present weekly lectures through the use of power point presentations and DVD presentations.

   2. Discuss chapter content and review homework in class to ensure students have knowledge prior to
assigned lab activities correlated to lectures and NATEF standards

3. Modeling trade techniques, during lab as it relates to the application of non structural repairs.

E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS
   Time spent on coursework in addition to hours of instruction (lecture hours)
   a. Weekly reading assignments
   b. Weekly homework chapter assignments
   c. Weekly NATEF Auto Body Task Sheets
   d. Content Review and Studying for Bi Monthly Quizzes
   e. Content Review for Midterm and Final Exam

2. EVIDENCE OF CRITICAL THINKING
   Assignments require the appropriate level of critical thinking
   a. What can you do to make your shop a safer place in which to work?
   b. What happens to a vehicle during a collision?
   c. How would you determine whether a vehicle is repairable or a total loss?
   d. After shrinking a steel panel, the technician finds a flat area under tension and lower than the rest of the panel. What is wrong?
   e. How and why do you remove paint before using body filler?

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:
   Describe fundamental terms used in the collision repair industry, analyze, evaluate, and manipulate the repair or replacement of non structural steel panels.

B. STUDENT LEARNING GOALS
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

   1. Required Learning Goals
      Upon satisfactory completion of this course, the student will be able to:
      a. Select and operate the basic metal repair techniques with damage characteristics to make the appropriate repairs.
b. Identify and distinguish different body construction types verbally and in a lab setting.

c. Identify and demonstrate industry safety standards pertaining to the use of chemicals and equipment in a shop environment.

d. Perform the various types of sheet metal welding methods to the appropriate application

2. **Lab Learning Goals**

   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Demonstrate the ability to comply with industry safety and environmental issues.

   b. Analyze, diagnose and perform minor repairs on non-structural steel panels

IV. **METHODS OF ASSESSMENT (TYPICAL)**

A. **FORMATIVE ASSESSMENT**

   1. Bi Monthly Quizzes
   2. NATEF Task Sheets
   3. Instructor Observation

B. **SUMMATIVE ASSESSMENT**

   1. Mid Term Exam
   2. Final Exam
Yes:

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Price</th>
<th>SubTtl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Straight Screwdriver</td>
<td>1</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Phillips Screwdriver</td>
<td>1</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Putty Knife</td>
<td>1</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Combination Pliers</td>
<td>1</td>
<td>7.50</td>
<td>7.50</td>
</tr>
<tr>
<td>6' Flashlight</td>
<td>1</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Air Nozzle</td>
<td>1</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Cheese Grater</td>
<td>1</td>
<td>3.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Plastic Spreader</td>
<td>2</td>
<td>1.00</td>
<td>2.00</td>
</tr>
<tr>
<td>4' Sanding Block</td>
<td>1</td>
<td>2.50</td>
<td>2.50</td>
</tr>
<tr>
<td>Safety Glasses</td>
<td>1</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>45.00</strong></td>
</tr>
</tbody>
</table>

1) Explain how these materials are related to the Student Learning Goals for the course.
   Students in the field need to acquire personal tools associated with the profession as they progress through program.

2) Explain how the materials have continuing value outside the classroom.
   Tools and supplies have continued market value and can be used to conduct professional and or home auto body collision related tasks.

3) Is the amount of material the student receives commensurate with the fee paid AND with the amount of material necessary to achieve the Student Learning Goals for the course AND provided at the district’s actual cost?
   Yes:

4) If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
   Consistency in quality and accuracy of tools enables professors to ensure safety in labs, uniformity in work being performed by students and efficiency of labs work scheduled throughout the semester (minimize delays that impact student learning).
Proposal Impact

AUBDY 301 Automotive Collision Repair 1
**Course Revision Minor**
Jeff Beebe

Courses

1. AUBDY 302 *Launched*
2. AUBDY 302 *Active*
3. AUBDY 322 *Pending*
4. AUBDY 322 *Active*

Cross Listed Courses

Programs

1. Autobody/Collision Repair A.A. Degree Major *New Program*
2. Autobody/Collision Repair Certificate of Achievement *Certificate Major Revision*
3. Autobody/Collision Repair Certificate of Achievement *New Program*
4. Autobody/Collision Repair A.A. Degree Major *A.A. Degree Major Revision*
5. Autobody/Collision Repair Certificate of Achievement *Certificate Major Revision*
6. Autobody/Refinishing A.S. Degree *New Program*
7. Autobody/Refinishing A.S. Degree *A.S. Degree Major Revision*
AUBDY 302 - Automotive Collision Repair 2  
Action Type: Course Revision Minor  
Effective: 
Primary Author: Jeff Beebe  
Other Author(s): 
CC Representative Approval By: 
CC Staff Review By: 
Division Dean Approval By: 

Rationale for Course Action

Transfer and GE Status

Course Data Elements

Credit Type: Requested  
Credit Sub-Type: Requested  
TOP Code:  
SAM Code:  
State Classification: I  
Open Entry/Open Exit: No  
Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY-302</td>
<td>Lecture</td>
<td>36.00</td>
<td>40%</td>
<td></td>
</tr>
<tr>
<td>AUBDY-302</td>
<td>Lab</td>
<td>156.00</td>
<td>60%</td>
<td></td>
</tr>
<tr>
<td>AUBDY-302</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>192</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collision Repair Kits</td>
<td>1</td>
<td>$50</td>
</tr>
</tbody>
</table>

These materials are related to the Student Learning Goals for the course because:

Students in the field need to acquire personal tools associated with the profession as they progress through program.

These items have continuing value because:

Tools and supplies have continued market value and can be used to conduct professional and or home auto body collision related tasks.

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Consistency in quality and accuracy of tools enables professors to ensure safety in labs, uniformity in work being performed by students and efficiency of labs work scheduled throughout the semester (minimize delays that impact student learning)
Enrollment Restrictions & Advisories

Prerequisite: AUBDY 301
Modesto Junior College  
Course Outline of Record  
AUBDY 302

I. **OVERVIEW**  
The following information will appear in the 2009 - 2010 catalog

**AUBDY-302 Automotive Collision Repair 2**  
5 Units

**Prerequisite:** Satisfactory completion of AUBDY 301 with a minimum grade of C or better  
**Materials Fee Required**

This course is designed for the intermediate student who has successfully completed AUBDY 301 with emphasis on Automotive plastics, structural repairs, corrosion protection, vehicle dimensions, and estimating damage. Field trips might be required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**  
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   A. Plastic and composite repairs
      1. Types of materials
      2. Safety procedures
      3. Adhesives
      4. Structural and non-structural repairs
      5. Removal and replacement

   B. Corrosion protection
      1. What is corrosion
      2. Anticorrosion materials
      3. Safety procedures
      4. Basic surface preparation
      5. Corrosion treatments
      6. Acid rain damage
      7. Industrial fallout damage

   C. Passenger compartment service
      1. Passenger compartment assemblies
      2. Interior trim
      3. Dash panel service
      4. Instrument cluster service
      5. Locating air and water leaks
      6. Rattle elimination

   D. Welded panel replacement
2. **Required Lab Content:**

   a. Plastic and Composite Repairs
      i. Repair and Replacement

   b. Corrosion Protection
      i. Sureface Preparation
      ii. Anticorrosion Materials

   c. Passenger Compartment Service
      i. Repair and Replacement

   d. Welded Panel Replacement
      i. Spot Weld Removal
      ii. Panel Removal
      iii. New panel Installation

   e. Vehicle Dimensions
i. Tram Gauges

ii. Diagnosing Damage

iii. Computer Measuring Systems

f. Estimating Repair Costs

   i. Analyze

   ii. Evaluate

   iii. Calculate

B. **ENROLLMENT RESTRICTIONS**

1. **Prerequisites**

   Satisfactory completion of AUBDY 301 with a minimum grade of C or better.

2. **Requisite Skills**

   *Before entering the course, the student will be able to:*

   a. Describe fundamental terms used in the collision repair industry.

   b. Analyze, evaluate, and manipulate the repair or replacement of non-structural steel panels.

C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>36.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Lab</td>
<td>156.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. **METHODS OF INSTRUCTION (TYPICAL)**

   *Instructors of the course might conduct the course using the following method:*

   1. Present weekly lectures through the use of power point presentations and DVD presentations.

   2. Discuss chapter content and review homework in class to ensure students have knowledge prior to assigned lab activities correlated to lectures and NATEF standards.

   3. Modeling trade techniques, during lab, as it relates to the application of non structural repairs.

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   *Time spent on coursework in addition to hours of instruction (lecture hours)*
i. Reading Assignments
ii. Homework Chapter Assignments
iii. NATEF Lab Sheets

b. Bi Monthly
   i. Content Review and Study for Quizzes

c. Mid Term
   i. Content Review and Study for Exam

d. Final
   i. Content Review and Study for Final Exam

2. EVIDENCE OF CRITICAL THINKING
   Assignments require the appropriate level of critical thinking

   a. Describe the two major categories of plastics and how to identify the different types.
   b. Identify and list the functions of a typical passenger compartment.
   c. Summarize four basic safety rules to follow when working with anti-corrosion compounds.
   d. Explain seven steps in a basic collision damage diagnosis procedure.
   e. Describe the function of the California Bureau Automotive Repair.
   f. Perform a compete damage report including all labor, part prices, paint materials, and sales tax.

F. TEXTS AND OTHER READINGS (TYPICAL)

III. DESIRED LEARNING

A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:
   Enter into the automotive collision repair industry as an entry level technician.

B. STUDENT LEARNING GOALS
Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**
   Upon satisfactory completion of this course, the student will be able to:
   a. Identify and perform procedures used in automotive plastic and composite repairs.
   b. Explain and choose correct procedures for corrosion protection to meet manufacturer’s specifications.
   c. Analyze, evaluate and estimate vehicle collision damage.

2. **Lab Learning Goals**
   Upon satisfactory completion of the lab portion of this course, the student will be able to:
   a. Demonstrate the correct procedure used in plastic adhesive repairs.
   b. Demonstrate correct procedures for corrosion protection to meet manufacturer's specifications.
   c. Analyze, evaluate, and estimate vehicle collision damage.
   d. Perform the necessary steps for removing and replacing a welded body panel.

### IV. METHODS OF ASSESSMENT (TYPICAL)

#### A. FORMATIVE ASSESSMENT

1. Bi-monthly Quizzes
2. NATEF task sheets
3. Instructor observation

#### B. SUMMATIVE ASSESSMENT

1. Midterm exam
2. Final exam
Materials Fee

Yes:

Provide a cost breakdown for all items provided for a materials fee. Each item must become "tangible personal property" of the student upon payment of the fee and completion of the course. #

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Price</th>
<th>SubTtl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Collision Repair Kits</td>
<td>1</td>
<td>50.00</td>
<td>50.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>50.00</strong></td>
</tr>
</tbody>
</table>

1) Explain how these materials are related to the Student Learning Goals for the course.

Students in the field need to acquire personal tools associated with the profession as they progress through program.

2) Explain how the materials have continuing value outside the classroom.

Tools and supplies have continued market value and can be used to conduct professional and or home auto body collision related tasks.

3) Is the amount of material the student receives commensurate with the fee paid AND with the amount of material necessary to achieve the Student Learning Goals for the course AND provided at the district’s actual cost?

Yes:

4) If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Consistency in quality and accuracy of tools enables professors to ensure safety in labs, uniformity in work being performed by students and efficiency of labs work scheduled throughout the semester (minimize delays that impact student learning)
Proposal Impact

AUBDY 302 Automotive Collision Repair 2
**Course Revision Minor**
Jeff Beebe

Courses

1. AUBDY 303 *Active*
2. AUBDY 303 *Pending*

Cross Listed Courses

Programs

1. Autobody/Collision Repair A.A. Degree Major *New Program*
2. Autobody/Collision Repair Certificate of Achievement *Certificate Major Revision*
3. Autobody/Collision Repair Certificate of Achievement *New Program*
4. Autobody/Collision Repair A.A. Degree Major *A.A. Degree Major Revision*
5. Autobody/Collision Repair Certificate of Achievement *Certificate Major Revision*
6. Autobody/Refinishing A.S. Degree *New Program*
7. Autobody/Refinishing A.S. Degree *A.S. Degree Major Revision*
Rationale for Course Action

Transfer and GE Status

Course Data Elements

Instructor Load

Material Fees

These materials are related to the Student Learning Goals for the course because:

Students in the field need to acquire personal tools associated with the profession as they progress through program.

These items have continuing value because:

Tools and supplies have continued market value and can be used to conduct professional and or home auto body collision related tasks.

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
Consistency in quality and accuracy of tools enables professors to ensure safety in labs, uniformity in work being performed by students and efficiency of labs work scheduled throughout the semester (minimize delays that impact student learning)

Program Relationships

Program: Autobody/Collision Repair Award: Certificate of Achievement
I. **OVERVIEW**
   The following information will appear in the 2009 - 2010 catalog

**AUBDY-321 Automotive Spray Refinishing 1**

2 Units

**Materials Fee Required**

Introduction to automobile spray painting. Study of materials, supplies and equipment. Experience in feather edging and application of base coats; spray techniques in spot blending and panel refinishing with a base coat and clear coat. Field trips might be required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**
   Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   A. Safety Procedures
      1. Storing flammable materials
      2. Respirators and dust masks
      3. Ventilation
      4. Toxic materials
   B. Automotive finishes
      1. Basecoats
         a. Primer
         b. Primer-surfacer
         c. Primer-sealer
         d. Sealers-clear and pigmented
      2. Color coats (top coats)
         a. Base coat
         b. Clear coat
         c. Synthetic (alkyd) enamel
   C. Sanding and Compounding
      1. Sandpaper
         a. Wet-or-dry
         b. Dry non-fill
      2. Coat and grit abrasive designations
         a. Power sanders
         b. Disc sanders
c. Orbital disc sanders
d. Reciprocating air sanders

3. Compound
   a. Hand
   b. Machine

D. Polishing Compound Shop Equipment
   1. Compressed air supply
   2. Regulator and transformer
   3. Water traps

E. Spray Guns
   1. Types
   2. Cleaning and maintenance
   3. Adjustments
   4. Rebuilding

F. Surface Preparation
   1. Chemical strippers (paint remover)
   2. Metal conditioners (Metal etch)
   3. Featheredging Primer-surfacer build up
   4. Guide-cooling
   5. Taping and masking

G. Base Coat/Clear Coat
   1. Mixing
   2. Gun Adjustments
   3. Spray techniques
      a. Triggering
      b. Overlap
      c. Double coat and single coats
   4. Panel refinishing
   5. Spot painting and blending

2. **Required Lab Content:**

   A. Safety
      1. Personal Safety
      2. General Shop Procedures
      3. Hazardous Material Precautions

   B. Refinish Equipment
      1. Spray Guns
      2. Equipment and Material Preparation
3. Spray Booths
4. Air supplied Respirators

C. Surface Preparation
   1. Evaluate Surface Condition
   2. Paint Removal
   3. Primecoat Selection
   4. Final Sanding

D. Refinishing
   1. Color Choice
   2. Sealers
   3. Basecoats
   4. Clearcoats

E. Paint Problems and Final Detail
   1. Repairing Defects
   2. Compounding
   3. Final Detailing

B. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>18.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lab</td>
<td>54.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

C. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Related material will be presented in the classroom with the use of videotapes, slides, transparencies and information/procedure sheets
2. Students will demonstrate subject understanding by writing summaries outlines and sequential procedures obtained from text and data manuals
3. Students participate in class discussions, and present their own personal views on problem solving procedures
4. Required lab projects are completed by the student and graded
5. Students must analyze, and present their assessment of paint problems encountered in lab procedures, before correcting
6. Given an information sheet as a guide, the student must select materials, formulate a sequence and apply base coat and clear coat to meet trade standard

D. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS

Time spent on coursework in addition to hours of instruction (lecture hours)
a. Weekly reading assignments
b. Weekly homework chapter assignments
c. Weekly NATEF Auto Body Task Sheets
d. Content Review and Studying for Bi Monthly Quizzes
e. Content Review for Midterm and Final Exam

2. **EVIDENCE OF CRITICAL THINKING**
   *Assignments require the appropriate level of critical thinking*
   a. How do you evaluate the surface condition of a vehicle?
   b. List some points to keep in mind when working with abrasives.
   c. What are VOC's and how do we record usage?
   d. Summarize the functions of a topcoat.
   e. Describe some reasons for overall refinishing.
   f. List the procedures for refinishing plastic parts.
   g. What happens if a technician uses too coarse of sandpaper before painting.
   h. Name the types of topcoats.
   i. Why do we blend base-coats?
   j. What is the purpose of isocyanates and how do we avoid exposure to them?
   k. Summarize the final detailing process.

E. **TEXTS AND OTHER READINGS (TYPICAL)**
   1. Other: Complete Automotive Painting, Scharff; Delmar Publishers, Inc.

III. **DESIRED LEARNING**

A. **COURSE GOAL**
   *As a result of satisfactory completion of this course, the student should be prepared to:*
   
   List and explain the steps involved in the application of paint to a vehicle and demonstrate these techniques on a small project.

B. **STUDENT LEARNING GOALS**
   *Mastery of the following learning goals will enable the student to achieve the overall course goal.*

   1. **Required Learning Goals**
      *Upon satisfactory completion of this course, the student will be able to:*
      
      a. Research and practice all paint safety regulations
      
      b. Calculate percentage for all paint additive and mixtures
c. Identify and rate different refinishing products

   d. Reconstruct a metal repaired area by feather edging and primer-surfacer build up

   e. Correctly mix paint, adjust the spray gun and apply base coat and clear coat

   f. Select proper additive mix and apply paint using the spot and blend method

   g. Adjust color hue and face by selecting the proper application techniques

   h. Color sand, buff and polish clear coat

   i. Tape and mask a single automobile panel for refinishing

2. **Lab Learning Goals**
   
   Upon satisfactory completion of the lab portion of this course, the student will be able to:

   a. understand the basics of painting a small project using water borne and solvent based paints.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

A. **FORMATIVE ASSESSMENT**

1. Weekly Homework Assignments

2. NATEF Task Sheets

3. Instructor Observation

B. **SUMMATIVE ASSESSMENT**

1. Mid Term Exam

2. Final Exam
Materials Fee

Yes:

Provide a cost breakdown for all items provided for a materials fee. Each item must become "tangible personal property" of the student upon payment of the fee and completion of the course.

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Price</th>
<th>SubTtl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daul Cartridge respirator</td>
<td>1</td>
<td>25.00</td>
<td>25.00</td>
</tr>
<tr>
<td>Safety Glasses</td>
<td>1</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Air Nozzle</td>
<td>1</td>
<td>5.00</td>
<td>5.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>35.00</strong></td>
</tr>
</tbody>
</table>

1) Explain how these materials are related to the Student Learning Goals for the course.

Students in the field need to acquire personal tools associated with the profession as they progress through program.

2) Explain how the materials have continuing value outside the classroom.

Tools and supplies have continued market value and can be used to conduct professional and or home auto body collision related tasks.

3) Is the amount of material the student receives commensurate with the fee paid AND with the amount of material necessary to achieve the Student Learning Goals for the course AND provided at the district’s actual cost?

Yes:

4) If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Consistency in quality and accuracy of tools enables professors to ensure safety in labs, uniformity in work being performed by students and efficiency of labs work scheduled throughout the semester (minimize delays that impact student learning).
Proposal Impact

AUBDY 321 Automotive Spray Refinishing 1
**Course Revision Minor**
Jeff Beebe

Courses

1. AUBDY 322 *Pending*
2. AUBDY 322 *Active*

Cross Listed Courses

Programs

1. Autobody/Collision Repair A.A. Degree Major *New Program*
2. Autobody/Collision Repair A.A. Degree Major *A.A. Degree Major Revision*
3. Autobody/Refinishing null *New Program*
4. Autobody/Refinishing A.S. Degree *A.S. Degree Major Revision*
5. Autobody/Refinishing A.S. Degree *New Program*
AUTEC 311 - Basic Automotive Systems

Action Type: Course Revision Major

Effective:

Primary Author: Gerald Wray

Other Author(s):

CC Representative Approval By:

CC Staff Review By:

Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code:
State Classification: I
Open Entry/Open Exit: No
Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTEC-311</td>
<td>Lecture</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>AUTEC-311</td>
<td>Lab</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>AUTEC-311</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>108</strong></td>
<td><strong>30%</strong></td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety glasses</td>
<td>1</td>
<td>$6.9</td>
</tr>
<tr>
<td>MJC shirt</td>
<td>1</td>
<td>$14.86</td>
</tr>
<tr>
<td>Binder &amp; dividers</td>
<td>1</td>
<td>$5.24</td>
</tr>
</tbody>
</table>

These materials are related to the Student Learning Goals for the course because:

Safety glasses are required to minimize the risk of eye injury to the student during lab procedures. The shirt is comparable to those provided by the automotive industry to their employees. It symbolizes a degree of professionalism and marketing for our programs. Students are required to submit a notebook binder for final grading.

These items have continuing value because:

Safety glasses and shirt can be used outside the classroom.

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather
than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Ensuring the glasses meet the required safety ratings and also a cost saving to the student. The shirts can only be obtained from the district. The binders and dividers are provided at a cost saving to the student. They also provide uniformity when submitting work for grading.
Modesto Junior College  
Course Outline of Record  

AUTEC 311

I. OVERVIEW  
The following information will appear in the 2009 - 2010 catalog

AUTEC-311 Basic Automotive Systems  
Materials Fee Required  

Introduction to the construction and operating principles of automotive systems to include; engine, cooling, lubrication, fuel, exhaust, and electrical. Proper selection and use of automotive shop manuals, service publications, tools, measuring devices, etc. Field trips might be required. Course is applicable to the associate degree.

II. LEARNING CONTEXT  
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

   a. Shop safety
      i. Environmental issues

   b. Tool identification, selection and use
      i. Hand
      ii. Power
      iii. Measuring
      iv. Metal working

   c. Fasteners
      i. Threaded fasteners
      ii. Non-threaded fasteners
      iii. Locking devices
      iv. Thread repair tools

   d. Service publications
      i. Service manuals/specification charts
      ii. Mitchell On-Demand, Alldata, and Prosis
e. Bearings and sealants

f. Introduction to cooling systems
   i. Air cooling
   ii. Liquid cooling

g. Introduction to lubrication systems

h. Introduction to fuel systems
   i. Mechanical fuel delivery
   ii. Electronic fuel injection (EFI)

i. Introduction to ignition systems
   i. Distributor
   ii. Distributorless

j. Introduction to exhaust and emissions systems

k. Introduction to electrical systems
   i. Electrical theory
   ii. Circuit construction
   iii. Electrical measurement

l. Automobile theories of operation
   i. Thermodynamics
   ii. Pressure and vacuum
   iii. Newton's Laws of Motion
   iv. Hydraulic theory

m. Vehicle design
   i. Aerodynamics
   ii. Passenger protection

n. Introduction to power systems
   i. Engine design and operation
2. **Required Lab Content:**

   a. Demonstrate safe working practices

   b. Metalworking project
      
      i. Use of metalworking tools

      ii. Use of charts to identify drill and tap combinations

      iii. Use of thread cutting tools

   c. Engine project
      
      i. Consult appropriate information sources to obtain engine specifications

      ii. Follow instruction correctly and use appropriate tools to dismantle and reassemble an internal combustion engine

      iii. Identify major engine components

      iv. Select and use appropriate measuring tools to determine servicableity of engine components

      v. Produce report of findings

3. **Recommended Content:**

   a. The automotive business
      
      i. Global automotive business

      ii. Local automotive business

      iii. Technician training

B. **HOURS AND UNITS**

   4 Units

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>54.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Lab</td>
<td>54.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

C. **METHODS OF INSTRUCTION (TYPICAL)**

   Instructors of the course might conduct the course using the following method:

   1. Related material will be presented through combined lecture, discussion, and lab demonstration.

   2. Additional studies will be required from manuals, references, and service publications.

D. ** ASSIGNMENTS (TYPICAL)**
1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**
   
   *Time spent on coursework in addition to hours of instruction (lecture hours)*
   
   a. Weekly reading and study of assigned textbook chapter in order to actively engage in classroom discussion.
   
   b. Completing chapter review questions each week and submitting for grading.
   
   c. Researching additional sources of information relating to the weekly topic of instruction.

2. **EVIDENCE OF CRITICAL THINKING**
   
   *Assignments require the appropriate level of critical thinking*
   
   a. Various manuals and service publications will be consulted to determine proper procedures for service or repair.
   
   b. Serviceability of engine components will be evaluated by comparing measurements taken with manufacturer’s specifications.
   
   c. Upon completion of research, planning and performing a defined task, a verbal and written report is required.

Typical Examples of Exam or Homework Questions:

a. The rim on a head gasket around the cylinder hole;
   
i. protects the gasket material from being damaged.
   
ii. seals the combustion chamber better.
   
iii. prevents combustion gases from entering the cooling system.
   
iv. all of the above.

b. Technician A says pressure is measured in inches of mercury. Technician B says vacuum is the absence of pressure. Who is correct?

E. **TEXTS AND OTHER READINGS (TYPICAL)**


III. **DESIRED LEARNING**

A. **COURSE GOAL**
   
   *As a result of satisfactory completion of this course, the student should be prepared to:*

   Demonstrate understanding of basic automotive shop safety. Identify the various types of hand and power tools used in the automotive industry. Describe the basic automotive systems and their respective functions.

B. **STUDENT LEARNING GOALS**
   
   *Mastery of the following learning goals will enable the student to achieve the overall course goal.*

1. **Required Learning Goals**
Upon satisfactory completion of this course, the student will be able to:

a. Identify the various types of hand and power tools as well as their uses.

b. Research various repair manuals and service publications to acquire information on repairs and maintenance of vehicles.

c. Apply safe practices during lab exercises.

d. Describe the basic automotive systems and their respective functions.

e. Understand the construction and operation of basic automotive system.

f. Demonstrate understanding of basic automotive shop safety.

2. Lab Learning Goals

Upon satisfactory completion of the lab portion of this course, the student will be able to:

a. Demonstrate safe working practices in the laboratory.

b. Demonstrate competence in the selection and use of various measuring tools.

c. Identify the main components of an internal combustion engine.

d. Demonstrate competence in the selection and use of basic hand tools.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Evaluation of demonstrated skill performed during labs.

2. Textbook chapter review questions.

3. Unit exams and quizzes.

B. SUMMATIVE ASSESSMENT

1. Final examination.

2. Notebook.
Yes:

Provide a cost breakdown for all items provided for a materials fee. Each item must become "tangible personal property" of the student upon payment of the fee and completion of the course.

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Price</th>
<th>SubTtl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety glasses</td>
<td>1</td>
<td>6.90</td>
<td>6.90</td>
</tr>
<tr>
<td>MJC shirt</td>
<td>1</td>
<td>14.86</td>
<td>14.86</td>
</tr>
<tr>
<td>Binder &amp; dividers</td>
<td>1</td>
<td>5.24</td>
<td>5.24</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>27.00</strong></td>
<td></td>
</tr>
</tbody>
</table>

1) Explain how these materials are related to the Student Learning Goals for the course.

Safety glasses are required to minimize the risk of eye injury to the student during lab procedures. The shirt is comparable to those provided by the automotive industry to their employees. It symbolizes a degree of professionalism and marketing for our programs. Students are required to submit a notebook binder for final grading.

2) Explain how the materials have continuing value outside the classroom.

Safety glasses and shirt can be used outside the classroom.

3) Is the amount of material the student receives commensurate with the fee paid AND with the amount of material necessary to achieve the Student Learning Goals for the course AND provided at the district's actual cost?

Yes:

4) If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Ensuring the glasses meet the required safety ratings and also a cost saving to the student. The shirts can only be obtained from the district. The binders and dividers are provided at a cost saving to the student. They also provide uniformity when submitting work for grading.
Proposal Impact

AUTEC 311 Basic Automotive Systems
**Course Revision Major**
Gerald Wray

Courses

1. AUTEC 312 *Active*
2. AUTEC 315 *Active*
3. AUTEC 317 *Pending*
4. AUTEC 317 *Active*
5. AUTEC 321 *Active*
6. AUTEC 322 *Active*
7. AUTEC 323 *Active*
8. AUTEC 324 *Active*
9. AUTEC 368 *Active*
10. AUTEC 373 *Active*

Cross Listed Courses

Programs

1. Autobody/Collision Repair Certificate of Achievement *Certificate Major Revision*
2. Autobody/Collision Repair A.A. Degree Major *A.A. Degree Major Revision*
3. Autobody/Refinishing A.S. Degree *A.S. Degree Major Revision*
4. Automotive Technician A.S. Degree *New Program*
5. Automotive Technician Certificate of Achievement *New Program*
6. Maintenance Mechanic Certificate of Achievement *New Program*
Reasons for expediting implementation of course modifications.

- To avoid loss of program accreditation
- To ensure student progression within program
- To comply with newly revised code or law
- To avoid loss of course articulation
- To facilitate workforce training demands
CGR 211 - InDesign and Typography 1

Action Type: Periodic Review
Effective:
Primary Author: Alan Layne
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: I
Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR-211</td>
<td>Lecture</td>
<td>36.00</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>CGR-211</td>
<td>Lab</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>CGR-211</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>90</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories
Advisory:

Program Relationships

Program: Printing and Lithography Award: Certificate of Achievement
Modesto Junior College
Course Outline of Record
CGR 211

I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

CGR-211  InDesign and Typography 1  3 Units
Formerly listed as: CGR - 211: Typography 1
Advisory: Before enrolling in this course, students are strongly advised to have basic computer skills: Mouse, file saving and opening, Text, etc.

CGR 211 covers beginning and advanced skills using InDesign for fundamentals of typesetting and composition. InDesign is the primary page layout software used in the Graphic Design and Printing majors for AA and AS Degrees. Field trips might be required. Course is applicable to the associate degree.

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

   a. Composition Categories

      1. Hot metal
      2. Cold Type
      3. Desktop publishing

   B. Typographical Concepts

      1. Point size
      2. Leading and line spacing
      3. Fixed spacing
      4. Text positioning
      5. Character width
      6. X-height

   C. Typeface Classifications

      1. Divisions
      2. Font
      3. Series
      4. Family
      5. Style
      6. Classifications

         a. Roman or Serif
         b. San Serif
         c. Square Serif or Slab Serif
d. Script

e. Text (Gothic an Old English)

f. Decorative or Novelty

7. History of Type

D. Software

1. Primary InDesign

2. PageMaker (origin of InDesign)

3. Quark XPress (Original page layout software preferred by Printers)

4. Word Processing (usually for text to be placed)

E. Point System

1. Type sizes

2. Line spacing or Leading

3. Converting from points to picas an inches

F. Copyfitting

G. Fixed Spacing

H. Type Anatomy

I. Proofreading symbols

J. Coding

1. Markup

K. Desktop systems and scanners

L. Functions

1. Queing

2. Processing

3. File Management

M. InDesign Skills

1. The Work Space

2. Building Pages

3. Working With Text

4. Working With Objects

5. Working With Pictures

6. Tables

7. Working With Color

8. Streamlining Production

9. Working With Layers

10. Text Utilities

11. Printing and Packaging
2. **Required Lab Content:**

Creation of page layout using InDesign.

1. Creating master pages, and marking up copy to create copy.
   a. Positioning copy left, right, centered, and justified
   b. Fonts, sizes, and variations
   c. Master pages
   d. Leading or line space
   e. Line length
   f. Proofing

2. Text frames or boxes
   a. Frame size, weight, design, and positioning of frames
   b. Frame text inset
   c. Leading, sizes, fonts, variations, and positioning of text
   d. Proofing

3. Manipulating Text
   a. Kerning
   b. Drop Caps
   c. Frame insets
   d. Italics and skewing

4. Tabs and Tables
   a. Setting Tabs
   b. Working with Tabs
   c. Creating Tables
   d. Table Basics
   e. Creating a Table from Existing Text

5. Creation of Forms
   a. Frames
   b. Tabs
   c. Applying Rules
   d. Verticle Rules

6. Logo Creation
   a. Drawing Tools
   b. Outline Text
   c. Graphics Text
   d. Placing T ype on Paths and Shapes
   e. Text manipulation after outlined

7. Flowing Text and Wrapping
   a. Flowing Text in Columns
   b. Text Wrapping Objects and Graphics
c. Setting Wrap offsets

c. Clipping Paths and White Space

8. Applying Styles

   a. Object Library
   b. Defining Styles
   c. Creating Character Styles
   d. Redefining Styles
   e. Using Find/Change

9. Grids, Guides, and Aligning Objects

   a. Document Presets
   b. Guides and Columns
   c. Using Grids to Align Objects
   d. Aligning an Distributing Objects

10. Production Essentials

   a. Specifying Color
   b. Applying Color to Document
   c. Swatches Panel
   d. Color Separations
   e. Printers Marks
   f. Managing Graphics Files
   g. Links Panel
   h. Prepress Tips
   i. Preflight the document

---

B. **ENROLLMENT RESTRICTIONS**

1. **Advisories**

   Before enrolling in this course, students are strongly advised to have basic computer skills: Mouse, file saving and opening, Text, etc.

---

C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>36.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Lab</td>
<td>54.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

---

D. **METHODS OF INSTRUCTION (TYPICAL)**

   *Instructors of the course might conduct the course using the following method:*

   1. Lectures.
2. Lab demonstrations.

3. Discussion.

4. Group projects.

5. Computer-assisted activities will be completed to develop skills in related topics.

6. Simulated maintenance will be conducted on varied pieces of equipment connecting theory to practical application.

E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS

   Time spent on coursework in addition to hours of instruction (lecture hours)

   A. Reading Each Week
      1. Weekly Chapter
      2. Weekly Chapter review

   B. Typesetting Labs each Week
      1. Instructor created labs to duplicate
      2. Chapter projects

   C. Recreate a Poster or Flyer
      1. Student Type layout (using good typography)
      2. Student Design
      3. Student Presentation
      4. Once or Twice a Semester

   D. Final Lab
      1. Use Mark-up Skills
      2. Tabs
      3. Tables
      4. Fonts and Variations
      5. Text Wraps
      6. Other InDesign Skills

   E. Written
      1. Review Questions
      2. Quizzes
      3. Mid Term
      4. Final
      5. Proofing

2. EVIDENCE OF CRITICAL THINKING

   Assignments require the appropriate level of critical thinking

   1. Type Identification - Collect 5 examples of each of the six Font Categories.
      a. Roman or Serif
b. San Serif

c. Square Serif or Slab Serif

d. Text (Old English or Gothic)

e. Script or Cursive

f. Decorative or Novelty

2. What is the short cut key for auto numbering?

3. Line space is measured from what to what?

4. Explain why a Roman font is a very good choice for a text book.

5. Explain why San Serif fonts are so frequently used.

6. Duplicate the supplied type lab sample, using mark-up skills and InDesign software.

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL

As a result of satisfactory completion of this course, the student should be prepared to:

Use Typography knowledge to create finished layouts using beginning and advanced skills used in
InDesign page layout software. Students will attain the following skills while completing CGR 211 labs and
lectures: printers point system, type face identification, mark-up procedures, preparation of files for output,
placing text and graphics, linking files, creating images with InDesign, and use typography layout skills.

B. STUDENT LEARNING GOALS

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals

   Upon satisfactory completion of this course, the student will be able to:

   a. Convert inches to picas and points; and points to inches with a printer's ruler to measure and
      layout specified dimensions when given specific inches, picas and points.

   b. Employ the basic characteristics of type anatomy to identify the six primary type-style
      classifications and describe their appropriate applications to graphic design when given type
      samples.

   c. Apply fixed and variable spacing to horizontally and vertically position type elements to match a
      prescribed format when given a layout to follow.

   d. Mark up typed copy to match a given original using the correct symbols and procedures when
      given a preprinted layout.

   e. Correct typeset copy using the respective proofreading symbols and format when given a type
      set copy ready for proofing.

   f. Create and edit a document file using the computer and page layout software when given a
      layout with proper editing or corrections.

   g. Synthesize the typographical concepts and computer software to compose several text files to
      be processed in a page layout software when given a lab assignment with specific skills.
necessary for completion.

h. Convert, recall, edit and save typesetting files using type commands and file functions when given a page layout file.

i. Queue files and process typeset work when given completed files.

j. Use the basic short cut keys to accelerate their speed to create completed layouts.

k. Use InDesign to create tables.

l. Use master pages.

2. **Lab Learning Goals**

   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Create a layout in 1 hour that includes columns, tabs, graphics with text wrap, formatting, color, and print.

   b. Proofread and correct errors in an InDesign document.

   c. Output files in the correct file formats as needed by the printer or output device.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

A. **FORMATIVE ASSESSMENT**

1. A written critique and grade given for each project

2. Examination and quizzes to demonstrate the understanding of objective course material

3. Individual assignments are given throughout the semester. The following criteria is used for evaluation:
   1. Group task analysis/troubleshooting
   2. Written examinations to include essays and quizzes
   3. Descriptive lab analysis
   4. Creation of product “mock-up”
   5. Task performance ratings
   6. Problem solving techniques
   7. Demonstrated skill performance (mechanical and electronic)
   8. Small group class presentations
   9. Written systems diagnosis/recommendations
   10. Evidence of learning expressed by increased competence in software and hardware skills.
   11. Inclusion of individual creative solutions to individual or common group problems, with emphases on group task analysis

B. **SUMMATIVE ASSESSMENT**

1. Final exam

2. Mid Term exam

3. Quizzes
Proposal Impact

CGR 211 InDesign and Typography 1
**Periodic Review**
Alan Layne

Courses

1. CGR 212 *Active*
2. CGR 230 *Active*
3. CGR 331 *Launched*
4. CGR 331 *Active*
5. CGR 333 *Active*
6. CGR 342 *Active*
7. CGR 395 *Pending*

Cross Listed Courses

Programs

1. Computer Graphics Applications Certificate of Achievement *New Program*
2. Flexographic Printing null *New Program*
3. Graphic Design A.A. Degree Major *New Program*
4. Graphic Design Certificate of Achievement *New Program*
5. Prepress null *New Program*
6. Print Journalism null *New Program*
7. Printing and Lithography Certificate of Achievement *New Program*
CGR 214 - Bindery

Action Type: Course Revision Major

Effective:

Primary Author: Alan Layne

Other Author(s):

CC Representative Approval By:

CC Staff Review By:

Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: I
Open Entry/Open Exit: No Work Experience: Occupational

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR-214</td>
<td>Lecture</td>
<td>18.00</td>
<td>33.33%</td>
<td></td>
</tr>
<tr>
<td>CGR-214</td>
<td>Lab</td>
<td>104.00</td>
<td>66.67%</td>
<td></td>
</tr>
<tr>
<td>CGR-214</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>122</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Program Relationships
Program: Printing and Lithography
Award: Certificate of Achievement
I. **OVERVIEW**
   
   The following information will appear in the 2009 - 2010 catalog

   **CGR-214  Bindery**

   **3 Units**

   Formerly listed as: CGR - 214: Printing Presses and Bindery 1

   Introduction to bindery work: planning, paper cutting, folding, assembling, finish work and packaging. Die cutting materials, Scoring, Numbering, Foil stamping, and embossing Field trips might be required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**

   Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

   **A. COURSE CONTENT**

   1. **Required Content:**

      A. Cutter

         1. Single cuts
         2. Multi Cuts with a program
         3. Trimming printed jobs

      B. Folder

         1. Table top folder
            a. letter fold
            b. accordian fold
            c. folding in half
            d. production folding
         2. Floor model folder with Right Angle
            a. Fold in Half
            b. Fold letter fold
            c. Fold accordian fold
            e. Right angle folds

      C. Stitcher

         1. Side stitching
         2. Saddle stitching
         3. Changing wire and clinchers for production stitching

      D. Drilling

         1. Three hole drill set up for 8 1/2 x 11 binder size
         2. Three hole drill set up for 5 1/2 x 8 1/2 binder size
         3. Round cornering
4. drill maintenance

E. Padding Press
   1. Padding compound
   2. Fan A Part Adhesive
   3. Packaging

F. Heidelberg Windmill
   1. Paper feeding
   2. Scoring
   3. Perforating
   4. Die Cutting
   5. Numbering
   6. Foil Stamping

7. Embossing

G. Binding Systems
   1. Thermal Binding
   2. Coil Binding
   3. Comb Binding
   4. Perfect Binding

H. Paper
   1. Sizes
   2. Weights
   3. Grain
   4. Textures
   5. Carbonless
   6. Making paper
   7. Paper cut calculations
   8. Specialty papers

2. **Required Lab Content:**

   A. Cutting
   B. Folding
   C. Stitching
   D. Padding
   E. Drilling
   F. Binding
Coil
Thermal
G. Specialty Press (Heidelberg Windmil)
H. Specialty equipment

B. **ENROLLMENT RESTRICTIONS**

1. **Requisite Skills**
   *Before entering the course, the student will be able to:*
   
a. Web the Flexographic Press

C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>18.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lab</td>
<td>104.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. **METHODS OF INSTRUCTION (TYPICAL)**

*Instructors of the course might conduct the course using the following method:*

1. Related material will be presented through combined lecture, discussion, and lab demonstrations.
2. Computer-assisted activities will be completed to develop skills in related topics.
3. Additional studies will be required from instructional manuals specific to equipment employed.
4. Cut plans will be dimensioned to meet a prescribed bindery format.
5. Mastery of each unit will be demonstrated by the completion of related lab projects.
6. In addition to course text, technical manuals will be studied to ascertain individual machine operation.
7. Simulated maintenance will be conducted on varied pieces of equipment to correlate theory to practical application.
8. Audio visual presentations will augment lecture: (film, slides, video, Power point, transparencies).
9. Guided tours of printing plants/businesses and related plants such as a paper mill.

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**
   *Time spent on coursework in addition to hours of instruction (lecture hours)*
   
   Weekly reading related to the weeks lecture.
   Weekly homework related to, or from text.
   Semester paper from research on specific Bindery area.
EVIDENCE OF CRITICAL THINKING

Assignments require the appropriate level of critical thinking

When adjusting the second fold of a letter fold how do you know which way to make your adjustment (leveling or increasing or decreasing the closing flap length?)

Pre-plan in order the cuts for a 10-up business card and list the cut lengths in order to program the cutter.

Evaluate the embossing die position to the foil and make the proper adjustments.

When the paper stops feeding on the Heidelberg windmill list the items you should check to remedy the problem.

When the paper stops delivery properly list the items you would check to remedy the problem.

When the stitch legs are overlapping what would you do to remedy the problem?

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL

As a result of satisfactory completion of this course, the student should be prepared to:

Perform all bindery operations with limited assistance in the Print Shop. Bindery operations include: Cutting, Folding, Stitching, Drilling, Binding (coil, comb, thermo binding), scoring, perforation, die cutting, foil stamping, embossing, numbering, and padding. Students will also have an excellent understanding of paper.

B. STUDENT LEARNING GOALS

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals

Upon satisfactory completion of this course, the student will be able to:

a. Fundamentals of Bindery Operations
b. Match a list of binding and finishing operations with brief descriptions of final format requested.
c. Compare a list of binding and finishing operations to the equipment requirements.
d. Assemble and label dummies for multiple page products.
e. Demonstrate knowledge of procedures used to determine the grain direction of different types of paper.
f. Identify paper samples by name when given a list of common papers and samples of each.
g. Identify and describe various finishing operations and the equipment required to perform: scoring, perforating, numbering, punching, die-cutting, foil stamping, and embossing.
h. Demonstrate knowledge of paper calculations, job docket preparation/processing, and
estimating. Including, estimating of entire job in paper, etc.

i. Cut paper and fold paper to job specifications.

j. Feed paper and score, perforate, and number on specialty presses for bindery.

k. Demonstrate the procedure used in the adjustment of feeders, feed board, and delivery systems.

l. Set up and fold Letter folds, Accordion, and half, in a three hour lab.

m. Set up and position foil stamping to the required location and establish proper impression and heat settings.

n. Set up and position embossing for tight registration to the foil stamping in the previous lab.

o. Set up and die cut boxes on the heidelberg windmill.

p. Perform parallel and right angle folds for 8 and 16 page signatures.

2. **Lab Learning Goals**

   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Operate table top and floor model folders, and perform parallel and right angle folds.

   b. Perform the following skills on the Heidelberg windmill: Score, perforate, die cut, number, foil stamp and emboss.

   c. Calculate and cut multiple cut projects from parent size sheets and finished press size sheets. Also to program the cutter for lab assignments.

   d. Set up and stitch both side and saddle stitched assignments to include changing wire sizes.

   e. Perform all functions on the drill: Sharpening bits, locating drill holes for specific jobs, and setting up and using the round corner function.

   f. Specialty scoring and perforation equipment set up and operation.

   g. perform all binding techniques: Fan Apart adhesive, padding, thermal binding, and coil binding.

   h. Set up and run the rewind equipment for the flexographic printing roll stock.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

   A. **FORMATIVE ASSESSMENT**

   1. Demonstrated skill performance

   2. Descriptive lab analysis

   3. Group task analysis/troubleshooting

   4. Problem-solving techniques

   5. Product mockup creation

   6. Small group class presentations.

   7. Task performance ratings
8. Written examinations to include essays
9. Written systems diagnosis/recommendations

B. **SUMMATIVE ASSESSMENT**
   
   1. Final Written test
   2. Lab finals on specific equipment for acquired skill level.
   3. Mid Term written test
Proposal Impact

CGR 214 Bindery
**Course Revision Major**
Alan Layne

Courses

1. CGR 222 *Launched*
2. CGR 222 *Active*
3. CGR 223 *Launched*
4. CGR 223 *Active*
5. CGR 332 *Active*
6. CGR 332 *Launched*
7. CGR 395 *Pending*

Cross Listed Courses

Programs

1. Flexographic Printing null *New Program*
2. Printing Maintenance null *New Program*
3. Printing and Lithography Certificate of Achievement *New Program*
CGR 223 - Lithographic & Flexographic Presses
Action Type: Course Revision Major
Effective:
Primary Author: Alan Layne
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status
CSU Transfer: Requested

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code:
State Classification: 
Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR-223</td>
<td>Lecture</td>
<td>18.00</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>CGR-223</td>
<td>Lab</td>
<td>108.00</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>CGR-223</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>126</td>
<td>35%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories

Curriculum Committee Agenda  Page 121  March 17, 2009
Program Relationships

Program: Printing and Lithography Award: Certificate of Achievement
Modesto Junior College
Course Outline of Record
CGR 223

I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

CGR-223 Lithographic & Flexographic Presses 3 Units
Formerly listed as: CGR - 223: Printing Presses and Bindery 2
Beginning skills in the operation of Lithographic Offset Presses an Flexographic Web Press. Students will be required to print multi colored work and produce 2,000 or more copies in a final 3 hour lab. Field trips might be required. Course is applicable to the associate degree.

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

A. Lithographic Theory
   1. Ink and Water
   2. Feeder systems
   3. Printing section
   4. Delivery section

B. Calculate the quantity of ink and press sheets needed to complete a prescribed single page press run.

C. PH factors involved with lithographic press

D. Press printing procedures
   1. feeder check
   2. image position check
   3. registration check
   4. cleanup check

E. Feeder systems
   1. types and components
   2. adjustments

F. Delivery systems
   1. types and components
   2. adjustments

G. Dampening systems
   1. types and components
   2. adjustments

H. Ink systems

Printed on: 26/02/2009 10:36 AM
1. types and components
2. adjustments

I. Register table systems
   1. types and components
   2. adjustments

J. Registration
   1. definition
   2. procedure
   3. multiple-color

K. Press chemistry
   1. dampening
   2. ink

3. Printing unit

L. Press maintenance
   1. lubrication
   2. cylinders
   3. rollers

M. Image carriers
   1. types
   2. exposure
   3. processing
   4. mounting

N. Flexographic Press
   1. Image carriers
      a. types
      b. exposure
      c. processing
      d. mounting
   2. Unwind
      a. webbing
      b. alignment/position
      c. rewind
   3. Ink setup
      a. annilox rolls
      b. nip roll settings
      c. doctor blade settings
      d. ink pan
      e. ink adjustment of annilox/doctor blade
   4. Printing section
      a. plate installation
b. set impression

5. Registration
   a. color registration
   b. die registration

6. Finishing
   a. die cutting
   b. underscore
   c. stripping label material
   d. counts
   e. rewind
   f. cleanup check

O. Pre-run preparation
   1. press sheets calculations
   2. ink consumption calculations
   3. press dummy or proof
   4. counts (flexo) and rolls

2. Required Lab Content:

   A. Lithographic press
      1. Safety
      2. Preparation/manuals
      3. Feeding
      4. Stripping, Printing and cleaning
      5. Position lab
      6. Registration lab (spot color)
      7. Position lab
      8. Registration lab duotone
      9. Production lab
     10. Envelope lab

   B. Flexographic web press
      1. Safety
      2. Preparation/manuals
      3. Webbing
      4. Printing
      5. Finishing
         a. die cutting
         b. underscore
c. stripping waste material
d. perforating and sheeting
6. Plate making
7. Plate mounting
8. Ink Ph
9. Water base ink, UV ink
10. Registration
11. Off press rewinding an finishing
12. Cleanup and annilox roller care
13. Doctor blade care

B. **ENROLLMENT RESTRICTIONS**

C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>18.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lab</td>
<td>108.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3 Units

D. **METHODS OF INSTRUCTION (TYPICAL)**

*Instructors of the course might conduct the course using the following method:*

1. Related materials will be presented through combined lecture, discussion, and lab demonstrations.
2. Computer-assisted activities will be completed to develop skills in related topics.
3. Additional studies will be required from instructional manuals specific to equipment employed.
4. Mastery of each unit will be demonstrated by the completion of related lab projects.
5. In addition to course text, technical manuals will be studied to ascertain individual machine operation.
6. Simulated maintenance will be conducted on varied pieces of equipment to correlate theory to practical application.
7. Audio visual presentations will augment lecture (film, slides, video, PowerPoint, transparencies etc.).
8. Guided tours of printing plants/businesses and related plants such as a paper mill.

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   1. Reading weekly in Lithographic Technology text.
   2. Reaing in the Flexographic manual weekly during 7 week rotation.
   3. Homework from chapters bi weekly.
   4. Research assignment per term.
2. **EVIDENCE OF CRITICAL THINKING**
   
   *Assignments require the appropriate level of critical thinking*
   
   1. Given a press sheet with two spot colors give the directions to properly position the second color to the first color.
   
   2. Given a Parent size sheet of 25 x 38 calculate the number of press sizesheets 8 x 10 can be cut from the parent size sheet and how many parent sheets will be needed to print 100,000 copies.
   
   3. Draw and label the Printing section of the press, to include cylinders, rollers, fountains.
   
   4. Research the causes of Slur on a printed sheet and give the possible solutions.
   
   5. In lab set up and position a two color project to industry standard.
   
   6. When a press problem arises the student will research the problem and give parts that may be needed to repair the press and install when delivered.

F. **TEXTS AND OTHER READINGS (TYPICAL)**


III. **DESIRED LEARNING**

A. **COURSE GOAL**

   *As a result of satisfactory completion of this course, the student should be prepared to:*

   Set up and run the Flexographic web press printing 1 to 4 colors and finishing them into rolls meeting industry standards. Student will be able to set up and run the Lithographic Offset duplicator printing 2,000 or more copies in a 3 hour lab and clean up meeting industry standards.

B. **STUDENT LEARNING GOALS**

   *Mastery of the following learning goals will enable the student to achieve the overall course goal.*

1. **Required Learning Goals**

   *Upon satisfactory completion of this course, the student will be able to:*

   a. Apply the properties of lithographic, and flexographic, and theory to specific problems.
   
   b. Measure pressure settings for roller and cylinder settings.
   
   c. Categorize ink and paper types and correlate each to the press running characteristics.
   
   d. Distinguish between the various image carriers, outline the exposure control methods and processing steps related to each.
   
   e. Describe the various types of registration systems used in a press plates. Complete a press run using each registration system on a two-color and four-color project.
   
   f. Measure pH factors of various chemicals, and identify those that meet acceptable range. Explain how pH affects the quality of print.
   
   g. Troubleshoot for press problems during actual press run. Identify the problem(s) in written format and describe steps taken to resolve situation.
   
   h. Set up and feed a variety of paper sizes and weights.
i. Clean the press, to include: fountain, fountain roller, doctor roller, water system, plate cylinder, blanket cylinder, impression cylinder, and the general press area.

j. Check the PH of the water base ink used in Flexographic printing.

k. Web the Flexographic press for water base inks and UV inks.

l. Set up the finishing section of the Web press for die cutting and underscoring or slitting for a specific job.

m. Select the proper anilox rolls for the work to be printed.

n. Make and mount their own plates.

o. Set up the printing section of the press to include: anilox rolls, ink pans, meter roll adjustment, doctor blade adjustment, and plate cylinder.

p. Set the plate impression, then the ink, and reset the plate impression.

q. Position and register two or more colors to the die and color to color.

r. Count and rewind finished printed product.

2. **Lab Learning Goals**

   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Offset Printing Feed all varieties of paper without assistance.

   b. Print a live job with industry standard registration and control of quality print for 2,000 or more copies without assistance.

   c. Flexographic press set up and print with tight registration and finish 5,000 labels in a 3 hour lab.

### IV. METHODS OF ASSESSMENT (TYPICAL)

#### A. **FORMATIVE ASSESSMENT**

1. Demonstrated skill performance

2. Descriptive lab analysis

3. Group task analysis/troubleshooting

4. Problem-solving techniques

5. Product mockup creation

6. Small group class presentations

7. Task performance ratings

8. Written examinations to include essays

9. Written systems diagnosis/recommendations

#### B. **SUMMATIVE ASSESSMENT**
1. At the completion of a lab rotation the student will be able to Print 2-4 colors in acceptable industry registration.

2. Final examination

3. Mid term examination
Proposal Impact

CGR 223 Lithographic & Flexographic Presses
**Course Revision Major**
Alan Layne

Courses

1. CGR 332 *Active*
2. CGR 332 *Launched*

Cross Listed Courses

Programs

1. Flexographic Printing null *New Program*
2. Printing Maintenance null *New Program*
3. Printing and Lithography Certificate of Achievement *New Program*
CGR 224 - Illustrator and Electronic Publishing
Action Type: Periodic Review
Effective:
Primary Author: Alan Layne
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status
CSU Transfer: Requested

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: I
Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR-224</td>
<td>Lecture</td>
<td>36.00</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>CGR-224</td>
<td>Lab</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>CGR-224</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>90</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories
Program Relationships

Program: Printing and Lithography Award: Certificate of Achievement
Modesto Junior College  
Course Outline of Record  
CGR 224

I. **OVERVIEW**  
The following information will appear in the 2009 - 2010 catalog

**CGR-224 Illustrator and Electronic Publishing**  
*Formerly listed as: CGR - 224: Electronic Publishing Systems*

Illustrator training and Introduction to electronic publishing systems, to include text generation, computer-designed graphics. Typographical applications and output devices, to include imagesetters wide format, and direct to plate devices. Current options for hardware and software used in the graphic communication industry and the advantages and disadvantages. Postscript and its role in electronic publishing. Course is repeatable - three completions allowed. Field trips might be required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**  
*Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:*

A. **COURSE CONTENT**

1. **Required Content:**

   A. Convert inches, whole numbers and fractions, to points and picas.

   B. Illustrator Basics

      1. New Document
      2. Understanding the Illustrator Window
      3. Creating basic shapes
      4. Applying fills and stroke
      5. Select, Move, and Align Objects
      6. Transform Objects
      7. Make Direct Selections

   C. Create Text and Gradients

      1. Create and Format Text
      2. Flow Text into Objects
      3. Position Text on Paths
      4. Create Colors and Gradients
      5. Create Drop Shadows

   D. Draw and Compose Illustrations

      1. Draw Straight and Curved Lines
      2. Draw Elements of an Illustration
      3. Apply Attributes to Objects
      4. Assemble Illustrations
      5. Stroke Objects for Artistic Effects
6. Use Live Trace and the Live Paint Bucket Tool

E. Transform and Distort Objects
   1. Offset and Outline Paths
   2. Create Compound Paths
   3. Work with the Pathfinder
   4. Create Clipping Paths

F. Work with Layers
   1. Create and Modify Layers
   2. Manipulate and work with Layered Art Work
   3. Create Clipping Sets

G. Work with Patterns and Brushes
   1. Create a Pattern and Design a Repeating Pattern
   2. Work with Brushes Panel
   3. Work with Scatter Brushes

H. Work with Filters, Gradient Meshes, Envelopes, and Blends
   1. Create filters, and gradient meshes
   2. Create Envelopes, and Blends

I. Work with Transparency, Live Color, Effects, and Graphic Styles
   1. Use Transparency Panel and the Color Picker
   2. Work with Live Color, and apply Effects to Objects
   3. Use Appearance Panel, and apply Graphic Styles

J. Create Graphics in Illustrator
   1. Create an edit Graphs
   2. Use the Group Selection Tool
   3. Use the Graph Type Dialog Box
   4. Create a custom Graph Design
   5. Create a Custom Graph Design
   6. Apply a Custom Design to a Graph

K. Draw with Symbols
   1. Create Symbols, and place Symbol Instances
   2. Modify Symbols and Symbol instances
   3. Create Symbol Instances Sets, and Modify them

L. Create 3D Objects
   1. Extrude Objects, Revolve, and Manipulate Surface Shading and Lighting
   2. Map Artwork to 3D Objects

M. Prepare Documents for Prepress and Printing
   1. Color Theory
   2. Working in CMYK and Spot Colors
   3. Create Crop Marks and Bleeds
N. Prepare Graphics for the Web
   1. Create Slices
   2. Specify Slice Type and Slice Options
   3. Use the Save for Web & Devices Dialog Box
   4. Create an Image Map

O. Analyze selected historical and contemporary aspects of the technology of Publishing Systems
   1. Identify new technology areas revolutionizing the way pages are published
   2. Knowledge of current publishing systems
      (through hands-on-experience)
   3. Evaluate Electronic publishing needs of a printing plant
      a. Specify optimal systems to meet needs

P. Types of Computers used in Desktop and Electronic Publishing

Q. Store files that incorporate Text and Graphics composed into page format

R. Graphics
   1. Vector
   2. Raster

S. Image Generation
   1. Printers
   2. Plotters
   3. RIPS (raster image Processor)
   4. Post Script

2. Required Lab Content:

A. Getting started with Illustrator
   1. New Document
   2. Exploring Illustrator Winow
   3. Creating basic shapes
   4. Fill and Strokes
   5. Select, Move, and Align Objects
   6. Transform Objects
   7. Make Direct Selections

B. Creating Text and Gradients
   1. Create and Format Text
   2. Flow Text into an Object
   3. Position Text on a Path
   4. Create Colors and Gradients
   5. Adjust a Gradient and Create a Drop Shadow

C. Drawing and Composing an Illustration
   1. Draw Straight Lines and Curven Lines
2. Draw Elements of an Illustration
3. Apply Attributes to Objects
4. Assemble an Illustration
5. Stroke Objects for Artistic Effect
6. Use Live Trace and the Live Paint Bucket Tool

D. Transforming and Distorting Objects
   1. Transform Objects
   2. Offset and Outline Paths
   3. Create Compound Paths
   4. Work with the Pathfinder Panel
   5. Create Clipping Masks

E. Working with Layers
   1. Create and Modify Layers
   2. Manipulate Layered Artwork
   3. Work with Layered Artwork
   4. Create a Clipping Set

F. Working with Patterns and Brushes
   1. Use the Move Command
   2. Create a Pattern
   3. Design a Repeating Pattern
   4. Work with the Brushes Panel
   5. Work with Scatter Brushes

G. Working with Filters, Gradient Meshes, Envelopes, and Blends
   1. Work with Filters
   2. Work with Gradient Meshes
   3. Work with Envelopes
   4. Create Blends

H. Working with Transparency Live Color, Effects and Graphic Styles
   1. Use the Transparency Panel and the Color Picker
   2. Work with Live Color
   3. Apply Effects to Objects
   4. Use the Appearance Panel
   5. Work with Graphic Styles

I. Creating Graphics in Illustrator
   1. Create a Graph and Edit Graph Using the Graph Data Window
   2. Use the Group Selection Tool
   3. Use the Graph Type Dialog Box
   4. Create a Combination Graph
   5. Create a Custom Graph Design
   6. Apply a Custom Design to a Graph
J. Drawing with Symbols
   1. Create Symbols and Place Symbol Instances
   2. Modify Symbols and Symbol Instances
   3. Create Symbol Instance Sets
   4. Modify Symbol Instance Sets
K. Creating 3D Objects
   1. Extrude Objects
   2. Revolve Objects
   3. Manipulate Surface Shading and Lighting
   4. Map Artwork to 3D Objects
L. Preparing a Document for Prepress and Printing
   1. Explore Basic Color Theory
   2. Work in CMYK Mode
   3. Specify Spot Colors
   4. Create Crop Marks
   5. Create Bleeds
M. Preparing Graphics for the Web
   1. Create Slices
   2. Specify Slice Type and Slice Options
   3. Use the Save for Web & Devices Dialog Box
   4. Create an Image Map

3. Recommended Content:
   A. Word Processing
   B. Typography Fundamentals
   C. System Analysis
   D. Mac & Windows Options

B. Enrollment Restrictions
   1. Requisite Skills
      Before entering the course, the student will be able to:
      a. Demonstrate basic computer skills.

C. Hours and Units

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3 Units</td>
<td></td>
</tr>
</tbody>
</table>
D. METHODS OF INSTRUCTION (TYPICAL)
Instructors of the course might conduct the course using the following method:

1. Lecture in class
2. Utilization of media such as, DVD, Power Point, Web, etc.
3. Demonstrations in the lab.
4. Related materials will be discussed in class lecture and in-plant reviews.
5. Computer-assisted activities will be completed to develop skills in related topics.

E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS
   Time spent on coursework in addition to hours of instruction (lecture hours)
   1. Weekly chapter reading assignments
   2. Weekly homework lessons from assigned chapters.
   3. Chapter projects assigned each week.
   4. Research assigned for mid Term assignment.
   5. Short cut key research assignments weekly.
   6. Research assigned for final project.

2. EVIDENCE OF CRITICAL THINKING
   Assignments require the appropriate level of critical thinking
   1. Completing the chapter projects each week requires critical thinking and using the skills learned in
      the chapter to create the projects using design skills.
   2. Students completing the lessons each week in their assigned chapters.
   3. Explain why you must select the correct spot color for your two color mid term assignment, and
      include the correct paper selection in your answer.
   4. What is the short cut key for the direct selection tool?
   5. Mid term and Final assignments require the students to create a design for clients for stickers,
      posters, flyers, or similar items to meet the clients needs using Illustrator skills and publishing
      specifications.

F. TEXTS AND OTHER READINGS (TYPICAL)

   Learning.
2. Other: Second completion allowed when a software update occurs.
III. DESIRED LEARNING

A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:

   Create graphics using illustrator software for output to the web, color printers, wide format printers and RIPs (raster image processors) to film or plate. Also to save in proper file formats for output using page layout software or Illustrator to a variety of output devices. Students will also use the proper color modes and colors for the output device required.

B. STUDENT LEARNING GOALS
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals
   Upon satisfactory completion of this course, the student will be able to:

   a. Convert inches, whole numbers, and fractions to points and picas.
   b. Apply computer principles.
   c. Develop typeset formats.
   d. Identify the basic components of type.
   e. Define the differences between fixed and variable spacing and compose text using each.
   f. Copy fit text to fit a prescribed layout area.
   g. Alter type using kerning techniques to space bodies of type.
   h. Outline the basic procedure required to generate image-setter output.
   i. List in order of application and describe the function of the electronic publishing equipment.
   j. Create and store files that incorporate text and graphics composed into page format.
   k. Design a simple layout using knowledge of type fundamentals, design basics, color basics, and text positioning.
   l. Define, create, retrieve, and edit copy as blocks to be placed in templates.
   m. Compare desktop publishing vs. typing and typesetting.
   n. Discuss the types of computers used in desktop and electronic publishing systems.
   o. Identify new technology areas that are revolutionizing the way pages are published.
   p. Demonstrate knowledge of current publishing systems through applied experience.
   q. Evaluate the electronic publishing needs of a printing plant, and specify optimal systems to meet industry needs.
   r. Illustrate images using Illustrator software.
   s. Create illustrations from a variety of client specifications.
   t. Incorporate original image(s) and text file into finished copy (i.e. brochure, flyer, program, etc.)

2. Lab Learning Goals
Upon satisfactory completion of the lab portion of this course, the student will be able to:

a. Create vector graphics using illustrator software for direct output, or to be placed in page layout software for output.

b. Trouble shoot files with output problems, and correct for final output.

c. Create graphics using the many advanced skills, Gradient mesh, Filters, Masking, etc.

d. Use the correct color modes to include spot colors for clients needs.

e. Design projects for clients using Illustrator as the primary software.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Evaluation of class Presentations

2. Evaluation of demonstrated skill performance in lab

3. Evaluation of group task analysis/troubleshooting

4. Evaluation of small group class presentations

5. Task performance ratings

6. Written examinations to include essays

7. Written systems diagnosis/recommendations

B. SUMMATIVE ASSESSMENT

1. Final exam

2. Mid Term exam

3. Quizzes
Proposal Impact

CGR 224 Illustrator and Electronic Publishing
**Periodic Review**
Alan Layne

Courses

1. CGR 230 *Active*
2. CGR 342 *Active*
3. CGR 395 *Pending*

Cross Listed Courses

Programs

1. Computer Graphics Applications Certificate of Achievement *New Program*
2. Graphic Design Certificate of Achievement *New Program*
3. Graphic Design A.A. Degree Major *New Program*
4. Prepress null *New Program*
5. Printing and Lithography Certificate of Achievement *New Program*
Modesto Junior College
CGR 331 Course Data Summary Report

CGR 331 - InDesign and Typography 2
Action Type: Periodic Review
Effective:
Primary Author: Alan Layne
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: I
Open Entry/Open Exit: No Work Experience: General

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR-331</td>
<td>Lecture</td>
<td>36.00</td>
<td>10%</td>
<td></td>
</tr>
<tr>
<td>CGR-331</td>
<td>Lab</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>CGR-331</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>90</td>
<td>25%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories
Prerequisite: CGR 211
Program Relationships

Program: Printing and Lithography Award: Certificate of Achievement
Modesto Junior College
Proposed Course Outline

CGR 331

I. OVERVIEW
The following information will appear in the 2010 - 2011 catalog

CGR-331 InDesign and Typography 2 3 Units
Formerly listed as: CGR - 331: Typography 2
Prerequisite: Satisfactory completion of CGR 211 with a minimum grade of C or better

InDesign and Typography 2 covers advanced skills in the page layout software InDesign and advanced skills of typography. History of Type, and the use of InDesign to perform advanced typography skills to produce outstanding; flyers, brochures, posters, etc. Field trips might be required. Course is applicable to the associate degree.

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

   A. Typographical Process
      1. Type spec procedure
      2. Markup technique
      3. Dummy creation
         a. single page
         b. multiple-page

   B. File Management
      1. Memory
      2. Disk storage
      3. File creation
      4. File editing
      5. File writing

   C. Editing Procedure
      1. Cursor movement
      2. Inserting characters
      3. Deletion
      4. Scrolling
      5. Defining/moving blocks

   D. Copy Blocks
      1. Definition
      2. Short cut keys
      3. Merging
4. Library items

E. Text Generation
   1. Word processing
   2. Direct entry
   3. Style sheets
   4. Proofing

F. Advanced Typographical Procedures
   1. Type refinements
   2. Leaders
   3. Indent functions
      a. tabs
      b. indent to here
      c. frame insets
   4. Text wrap
   5. Drop caps and initial letter
   6. Ruling
   7. Multiple columns

G. Copyfitting
   1. Mathematical formulas
   2. Mechanical

H. Pagination
   1. Format files
   2. Area composition
   3. Page numbering
   4. Multiple image per page
      a. step and repeat
      b. copy and paste
      c. paste in place

I. History of Type
   1. Origins
   2. Designers
   3. Classifications

J. Advanced Layer Work
   1. Text wrap layers
   2. Document layers

K. Grids, Guides, and Aligning Objects
   1. Using grids to align elements
   2. Aligning and distributing objects
   3. Other object management techniques
1. Character
2. Paragraph
3. Find and change
4. Libraries

M. Business Forms
1. General design considerations
2. Identity packages
3. Letterheads and envelopes
4. Designing for phone book

N. Production Essentials
1. Color
2. Separations
3. Printers marks
4. Graphics management
5. Links
6. Bridge
7. Prepress tips
8. Preflighting documents

O. Graphics Tools in InDesign
1. Pen tool
2. Paths
3. Compound paths

P. Advanced Type Anatomy

2. **Required Lab Content:**

A. Duplication of given layouts using InDesign.
B. Recreation of layouts done poorly using InDesign as the primary software.
C. Layouts given the clients specs and InDesign as the primary software.
D. Creation and Recreation of forms
E. Creation of Type Designer presentations.
F. Creation of text for placement into InDesign using OCR techniques, and Word files.
G. Creation of graphics within InDesign software.
H. Creation of layouts using a variety of graphics from Illustrator, Photoshop, or other graphics software.

B. **ENROLLMENT RESTRICTIONS**

1. **Prerequisites**

Satisfactory completion of CGR 211 with a minimum grade of C or better.
2. **Requisite Skills**

Before entering the course, the student will be able to:

a. Convert inches to picas and points; and points to inches with a printer’s ruler to measure and layout specified dimensions when given specific inches, picas and points.

b. Employ the basic characteristics of type anatomy to identify the six primary type-style classifications and describe their appropriate applications to graphic design when given type samples.

c. Apply fixed and variable spacing to horizontally and vertically position type elements to match a prescribed format when given a layout to follow.

d. Mark up typed copy to match a given original using the correct symbols and procedures when given a preprinted layout.

e. Correct typeset copy using the respective proofreading symbols and format when given a type set copy ready for proofing.

f. Create and edit a document file using the computer and page layout software when given a layout with proper editing or corrections.

g. Synthesize the typographical concepts and computer software to compose several text files to be processed in a page layout software when given a lab assignment with specific skills necessary for completion.

h. Convert, recall, edit and save typesetting files using type commands and file functions when given a page layout file.

i. Queue files and process typeset work when given completed files.

j. Use the basic short cut keys to accelerate their speed to create completed layouts.

k. Use InDesign to create tables.

l. Use master pages.

---

C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>36.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Lab</td>
<td>54.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3 Units

---

D. **METHODS OF INSTRUCTION (TYPICAL)**

Instructors of the course might conduct the course using the following method:

1. Lecture.

2. Discussion.

3. Lab demonstrations.

4. Computer-assisted activities will be completed to develop skills in related topics.

5. Simulated maintenance conducted on varied pieces of equipment connecting theory to practical application.
E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS
   Time spent on coursework in addition to hours of instruction (lecture hours)

   1. Weekly reading to support the weekly lab assignments to create a wide variety of layouts.
   2. Bi weekly short cut key quizzes also from reading and lecture.
   3. A presentation on a Type Designer.
   4. Lab evaluations of how students completed their work on labs that required layout and design in InDesign.

2. EVIDENCE OF CRITICAL THINKING
   Assignments require the appropriate level of critical thinking

   1. Recreate the given flyer done poorly and use good choices of type fonts, leading or line space, and utilize the skills learned to this point to make the flyer one that makes all want to attend the event.
   2. Create a presentation of a Type Designer and their work from a list of designers.
   3. Explain when you would use drop caps or initial letter for added appeal.
   4. What is the short cut for sizing type up or down?
   5. What is the short cut key for a bullet?
   6. Explain what type characteristics that you like in a font.
   7. Explain the reasons you would create outlines of a type font.
   8. Why is it important to preflight a document?

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:

   Create the wide variety of pieces possible with the page layout software InDesign. Have outstanding typography rule usage in creating the wide variety of assignments in this course. Students will also have an outstanding understanding of typography and how it can enhance their layouts. Students will also have advanced skills in the use of color, graphics, and output with InDesign.

B. STUDENT LEARNING GOALS
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

   1. Required Learning Goals
      Upon satisfactory completion of this course, the student will be able to:
a. Formulate InDesign techniques to define typeset formats when given a specific layout.

b. Construct formats to match special layout specifications to include: type refinements, indents, run around or text wrap, rule formats, and pagination when given a layout needing type refinement.

c. Copy text to fit a prescribed layout area when given copy fitting formulas.

d. Construct a multiple page document, then evaluate and edit for completion, given a multiple page layout.

e. Type spec and markup copy using the appropriate symbols and form given a copy or layout.

f. Define, create, retrieve, and edit copy blocks to be merged as templated for typeset files given multiple files from word processing in text format.

g. Calculate the space required to fit a given number of typewritten characters and calculate the number of characters to fit a defined layout dimension using the Character Per Pica Method when given copy-fitting formulas.

h. Create and edit a document file using industry software, and flow into page layout when given a text to be OCR scanned or typed in word processing software.

i. Synthesize the typographical concepts and computer software to compose a variety of files for output to RIP, printers, and PDF.

j. Make font selections that would best represent the client and enhance the design using the six type style classification.

k. Utilize leading or line space and font variations to put emphases on selected items within specific layout.

l. Presentations on type designer to include a written paper along with an oral presentation given a historical type designer.

m. Utilize InDesigns ability to create outlines of type an create text frames.

n. Output separations, register marks, and preflight files.

o. Create advanced forms using a variety of InDesign techniques.

p. Recreate existing layouts done poorly and apply InDesign and typography skills to give the layouts needed punch to meet our clients needs.

q. Create finished design given a clients specifications, InDesign software, Graphics, and required text.

2. **Lab Learning Goals**
   
   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Create Forms using Tabs, Tables, Step and Repeat, and Frames.

   b. Create well balanced and designed layouts for a variety of printing projects. Using InDesign as the primary software.

   c. Duplicate prescribed layouts using markup and problem solving skills.

   d. Increase the use of short cut keys to increase the production speed of all students.

   e. Create advanced layouts using placed images of vector, and raster formats, and having proper links.
IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Group task analysis/troubleshooting
2. Written examinations to include essays and quizzes
3. Descriptive lab analysis
4. Task performance ratings
5. Problem solving techniques
6. Demonstrated skill performance (mechanical and electronic)
7. Written systems diagnosis/recommendations
8. Oral presentation of assignments

B. SUMMATIVE ASSESSMENT

1. Quizzes
2. Mid Term
3. Final
Proposal Impact

CGR 331 InDesign and Typography 2
**Periodic Review**
Alan Layne

Courses

Cross Listed Courses

Programs

1. Graphic Design A.S. Degree *New Program*
2. Graphic Design Certificate of Achievement *New Program*
3. Journalism A.A. Degree Major *New Program*
4. Prepress null *New Program*
5. Printing and Lithography Certificate of Achievement *New Program*
CGR 332 Course Data Summary Report

CGR 332 - Advanced Presses
Action Type: Course Revision Major
Effective:
Primary Author: Alan Layne
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: I
Open Entry/Open Exit: No Work Experience: Occupational

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>CGR-332</td>
<td>Lecture</td>
<td>18.00</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>CGR-332</td>
<td>Lab</td>
<td>108.00</td>
<td>30%</td>
<td></td>
</tr>
<tr>
<td>CGR-332</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>126</td>
<td>35%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories
Recommended for success: CGR 214
: CGR 223 or
Modesto Junior College
Course Outline of Record
CGR 332

I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

CGR-332  Advanced Presses 3 Units
Formerly listed as: CGR - 332: Production Presses and Bindery
Advanced skills in the operation of Lithographic press and Flexographic press. Printing four colors in tight registration using a Lithographic press and a Flexographic press. Producing printed pieces for the college and meeting industry standards on those printing projects. Field trips might be required. Course is applicable to the associate degree.

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

A. Advanced Lithographic Press
   1. Press parts
   2. Registration
      a. definition
      b. procedure
      c. adjustments
   2. Press setup
      a. Feeder systems
         1. feeder check
         2. components
      b. Delivery systems
         1. types
         2. components
         3. adjustments
      c. Inking systems
      d. Roller systems
      e. Makeready
   3. Lithographic theory
      a. Ink
      b. Dampening solutions
   4. Press printing procedures
      a. feeder check
b. image position
c. registration check
d. print
e. cleanup check

5. Press maintenance
   a. System analysis
      1. components
      2. fluids
   b. Pumps
   c. Maintenance
      1. detection
      2. diagnosis
      3. correction
   d. Motors
      1. electrical
      2. configurations
      3. adjustments
      4. maintenance
   e. Scheduling techniques
   f. Lubrication routines

6. Image carriers
   a. Types
   b. Exposure
   c. Processing
   d. Mounting

7. Pre-run preparation
   a. Job docket
   b. Press sheet calculation
   c. Ink consumption calculation
   d. Press dummy

B. Printing Processes
   1. Letter press
   2. Flexographic
   3. Lithographic
   4. Gravure
   5. Screen printing
   6. Web and sheet feed

C. Advanced Narrow Web Flexographic Press
   1. Stack press
   2. Central impression
3. In-line press (the press we have)
4. Webbing
   a. Configurations
   b. Webbing with turner bar
   c. Webbing through finishing section
5. Plate making and mounting
   1. Materials
   2. Exposures
   3. Wash out
   4. Drying
5. Plate cylinders and tapes
   1. Integral cylinders
   2. Demountable cylinders (ours)
   3. Continuous cylinders
   4. Plate cylinder addition (blow-on sleeve).
6. Leveling and center plate
6. Gear drive and servo drive
7. Anilox Rolls
   a. Selection
   b. Cleaning
   c. Cell structures
8. Doctor Blades
   a. Types
   b. Care and maintenance
   c. Chamber blade system
9. Substrates
   a. Supercalendered
   b. Cast-coated
   c. Glassine
   d. Tissue
   e. Paperboards
   f. Foil
   g. Pressure sensitive coated films
10. Press Safety
    a. Lifting
    b. Common sense
    c. Pinch points
    d. Safety floor management
    e. Attitude
    f. Follow safety procedures
11. Inks and Solvents
   a. Types
   b. Components
   c. Systems
   d. Varnish
   e. Technology
   f. Viscosity
   g. pH
   i. Identification, handling, and Storage
   j. Characteristics of quality ink

12. Print station
   a. setup
      1. doctor blade
      2. pan or meter roll
      3. ink pan
      4. anilox
      5. meter roll and doctor blade settings
      6. plate cylinder impression
      7. ink setting
      8. reset plate cylinder impression
      9. registration from station to station
   b. Strobing print registration
   c. Registering to the dies

13. Finishing tooling
   a. Die selection
   b. Die installation and setting
   c. Underscore
   d. Waste removal
   e. Laminating station

14. Rewinding
   a. single roll
   b. multiple rolls
   c. roll tension

15. Color matching
   a. PMS color swatches
   b. Anilox roll choices
   c. Ink mix

16. Performance and quality check
   a. visual
   b. strobbed
2. **Required Lab Content:**

   A. Advance Lithographic Press
      1. Press prep
      2. Feeding
         a. feed table
         b. register table
         c. delivery
      3. Ink and water setup
      4. Plate mounting
      5. Blanket mounting
      6. Set fountain keys
      7. Zero micro adjustments
      8. Print single color
      9. Clean press
         a. fountain rollers
         b. ink system
         c. cylinders
         d. bearers
      10. Print two color
          a. feeder
          b. position
          c. registration check
          d. print
          e. clean
      11. Press maintenance
          a. daily
          b. weekly
          c. monthly
          d. bi-annually
      12. Four color press run
          a. feeder
          b. position
          c. register
          d. print
          e. clean
      13. Production press runs
          a. feeder @ 10,000 sheets per hour
          b. print 5,000 in 3 hour lab
          c. register two color
d. maintain ink density within 10 points

e. cleanup

B. Advanced Flexographic Web

1. Make and mount plates

2. Perform Press maintenance
   a. air systems
   b. motors
   c. mechanical systems
   d. daily, weekly, monthly and bi-annual

3. Select and setup tooling

4. Document the press run

5. Print single color

6. Print two or more colors

7. Print Process or CMYK
   a. setup web and tooling
   b. setup the print stations
   c. print and register first color to die
   d. register remaining for colors
   e. rewind into rolls
   f. finish rolls into customer size rolls or sheets

8. Trouble shoot press problems

9. Tour web Flexo printing facility

B. ENROLLMENT RESTRICTIONS

1. Requisite Skills
   Before entering the course, the student will be able to:

   a. Demonstrate flexographic press basics.

C. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>18.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lab</td>
<td>108.00</td>
<td>2.00</td>
</tr>
</tbody>
</table>
D. METHODS OF INSTRUCTION (TYPICAL)
Instructors of the course might conduct the course using the following method:

1. Related material will be presented through combined lecture, discussion, and lab demonstrations.
2. Computer-assisted activities will be completed to develop skills in related topics.
3. Instructional manuals (specific to equipment being operated) will be used as reference documentation for additional studies.
4. Technical/Instructional manuals will be studied to explain individual equipment operation, in addition to course text(s).
5. Simulated maintenance will be conducted, on varied pieces of equipment, to correlate theory to practical application.
6. Audio visual presentations will augment lecture: (film, slides, video, Power Point, transparencies).
7. Guided tours of printing plants/businesses and related manufacturing facilities, such as a paper mill.

E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS
Time spent on coursework in addition to hours of instruction (lecture hours)
Reading in the Offset Lithography Technology text weekly (1-2 hours)
Reading in the Flexographic Narrow web training system manual (1-2 hours)
Weekly during 7.5 week rotation on Flexo.
Two research assignments one on Flexographic printing and one on Lithographic printing.

2. EVIDENCE OF CRITICAL THINKING
Assignments require the appropriate level of critical thinking
Research the causes of slur on the offset press, and give a list of remedies.
Research the types of film treatment devices available to increase the ability of the film to receive ink.
If your offset press is not feeding correctly what would you check and correct if necessary?
What could cause your die on the flexo web to only be cutting on one side? and what could have cause that problem?
(Offset press question) If you are making micro adjustments in the up direction and you are getting opposite results what is the problem?

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL
As a result of satisfactory completion of this course, the student should be prepared to:

Operate Lithographic press and print with precision registration. Students will also print with the Flexographic Web press with precision registration and finishing.

B. STUDENT LEARNING GOALS
Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals
Upon satisfactory completion of this course, the student will be able to:

a. Apply the properties of lithographic theory to specific large format presswork problems.

b. Calculate the number of counts to complete a specific quantity of labels.

c. Design a large, sophisticated offset lithographic press configuration to include all systems discussed in lecture.

d. Demonstrate procedures used in the adjustment of feeder, register table, and delivery systems.

e. Categorize ink and paper type, and correlate each to the press running characteristics.

f. Calculate the quantity of ink and press sheets needed to complete a press run using registered plates if a four color project.

g. Distinguish between the various image carriers and outline the exposure control methods and processing steps related to each.

h. Describe the various types of registration systems used on press plates and complete a press run using registered plates on a four color project.

i. Measure pH an conductivity factors of various chemicals and identify those that meet acceptable range and explain how pH and conductivity affects the quality of print.

j. Troubleshoot for press problems during actual press run. Identify the problem in written format and describe steps taken to resolve the situation or problem.

k. Apply the properties of flexographic theory to specific narrow web press problems.

l. Measure pressure settings for roller and cylinder settings and make necessary adjustments.

m. Rewind finished product onto shipping size rolls.

n. Process plates for printing using data to select proper exposures.

o. Mount plates for four color printing.

p. Maintain and make necessary adjustments, as needed for quality printing.

q. Set up and feed paper with the proper pull and delivery on the PM52 or equivalent press.

r. Perform daily, weekly, monthly, an bi annual maintenance on Flexographic and Lithographic presses.

s. Perform press maintenance, identification of defective parts and ordering for replacement and installation.

t. Set up and run UV ink, with proper drying, and cleanup.

u. Evaluate Electrical UV ink, with proper drying, and cleanup.

v. Perform pre-run preparation, to include Job Docket, Press sheet or roll calculations, Ink consumption calculation, and Press dummy.
w. Maintain and analyze Flexographic and Lithographic pumps, and air systems.

x. Adhere to the proper safety procedures for Flexographic and Lithographic printing.

y. Adjust and select Flexographic inks for quality printing to include: viscosity using a Shell or Zahn cup, Ph, an automatic ink viscosity controllers, and matching ink with substrates.

a'. Web and setup the finishing operations to include: die cutting station, laminating station, waste removal station, exit nip roll, Web viewing, slitter station, static eliminators, rewind section components and rewind controls.

aa. Match color on the Flexographic press or the Lithographic press using the unique methods of each process.

ab. Maintain proper record keeping for Flexographic printed jobs.

2. **Lab Learning Goals**

   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Setup and run 5,000 process or cmyk sheets on the PM52 or equivalent lithographic press in two three our labs. Meeting industry standards.

   b. Setup and select all the proper tooling to run print 20,000 labels in process color or cmyk in one three hour lab and perform all finishing operations.

### IV. METHODS OF ASSESSMENT (TYPICAL)

#### A. **FORMATIVE ASSESSMENT**

1. Demonstrated skill performance
2. Descriptive lab analysis
3. Group task analysis/troubleshooting
4. Problem-solving techniques
5. Product mockup creation
6. Small group class presentations
7. Task performance ratings
8. Written examinations to include essays
9. Written systems diagnosis/recommendations

#### B. **SUMMATIVE ASSESSMENT**

1. Final Test
2. Lab Final
3. Midterm tests
Proposal Impact

CGR 352 Production Management
**Course Revision Minor**
Alan Layne

Courses

Cross Listed Courses

Programs
Modesto Junior College
FSCI 322 Course Data Summary Report

FSCI 322 - Fire Service Career Development/Promotions

Action Type: Course Revision Major
Effective:
Primary Author: John Sola
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: 2133.00  SAM Code:  State Classification: I
Open Entry/Open Exit: No  Work Experience: Occupational

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCI-322</td>
<td>Lecture</td>
<td>45.00</td>
<td>14.71%</td>
<td></td>
</tr>
<tr>
<td>FSCI-322</td>
<td>Lab</td>
<td>27.00</td>
<td>8.82%</td>
<td></td>
</tr>
<tr>
<td>FSCI-322</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>72</td>
<td>23.53%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories

Prerequisite: FSCI 301
Modesto Junior College  
Course Outline of Record  
FSCI 322

I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

FSCI-322  Fire Service Career Development/Promotions  3 Units

Formerly listed as: FSCI - 322: Fire Service Career Development/Promotions

Prerequisite: Satisfactory completion of FSCI 301.

Introduction to Fire Service Career Development. This course of instruction is designed to assist fire science students to prepare for entry level and interdepartmental Fire Service examinations. To be considered an eligible candidate students must have a working knowledge of fire service testing standards and terminology. Students will collect information for the application processes, resume writing, entry level written tests, mechanical aptitude and oral interviews. Students are also instructed on aspects of preemployment medical and psychological tests and background checks. Field trips might be required. Course is applicable to the associate degree.

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

A. Self Confidence
   1. Goal/result oriented lifestyle
      a. Measurable
      b. Realistic
      c. Dream with a time line

B. Attitude
   1. Mental replays of success
   2. Attitudes/traits survey
   3. Self awareness
   4. Expanding your horizons

C. Reality and accountability
   1. Perceptions
   2. Reticular activating system
   3. Goodall studies in Long Beach
   4. Transform fear into action
   5. Practice for recovery not the crash

D. Values
   1. Fire Service values in general.

E. Self-Evaluation
   1. Value identifying questions
   2. Develop sense of self
   3. Maturity
   4. Developing assets to set self apart from others
   5. Values seen as positive or negative

F. Well rounded career background
   1. Education
   2. Specialized training
   3. Non-fire related
   4. Intergovernmental relations

G. Fire Department requirements
   1. Professional skills
   2. Certifications
H. Outside skills
I. Positive character traits and qualities
   1. How and where would you fit into the organization?
J. Promotional development
   1. Education
K. Written tests for fire service
   1. What skills are departments seeking?
   2. Types of questions
   3. Scoring
   4. Review tests given in past
   5. What do you need to know?
L. Resume for fire service
   1. Purpose and value
   2. Format
   3. Education
   4. Experience
   5. Skills
   6. Background/maturity
   7. Action oriented adjectives
   8. Typewritten
   9. Don't appear too packaged
M. Resume essentials
   1. Do not exceed 2 pages
   2. Do not waste space providing
   3. References (don't drop names)
   4. Statements on religion or politics
   5. Tailor each resume for position being sought
N. Oral interviews
   1. Most important employment tool in the Fire Service.
   2. First impressions are the most important.
   3. Clothing
   4. Demeanor
      a. Handshake
      b. Humility
      c. Eye contact
      d. Positive attitude, (smiling and happy to be there)

2. **Required Lab Content:**
   
   a. Analyze and determine the proper strategies to adapt to different Fire Department testing processes.

   b. Research Fire Departments to identify organizational structures that will help students in the testing and oral interview process.

   c. Develop applications and resumes that comply with Fire Department requirements

   d. Enable the student to pinpoint areas of weakness in the terms of NFPA Standard 1001.

   e. Discuss the improved qualifications and standards for Fire and Emergency Medical Service personnel.

3. **Recommended Content:**
   
   a. Maturity
      i. Forward perspective
      ii. Personal goals
iii. vision of the future

b. Board members
   i. Types of people and positions held
   ii. What are they looking for.
   iii. Types of questions generally asked

c. Your preparation
   i. What points do you want to make
   ii. How can you fit your points into any question
   iii. Being genuine

d. Learn from your mistakes
   i. Write down questions after board
   ii. Feedback

e. Mock oral boards
   i. Student evaluation and make judgments

f. Career Development Strategies
   i. Power bases
   ii. Internal
   iii. External

B. **ENROLLMENT RESTRICTIONS**

1. **Prerequisites**

   Satisfactory completion of FSCI 301.

2. **Requisite Skills**

   *Before entering the course, the student will be able to:*

   a. List the educational requirements, duties, and information sources for various occupations in fire protection.

   b. Identify the types of common fire department apparatus, equipment, and personal safety.

   c. Identify the various codes, standards, ordinances, and regulations that affect fire protection and the functions of a fire prevention bureau.
C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>45.00</td>
<td>2.50</td>
</tr>
<tr>
<td>Lab</td>
<td>27.00</td>
<td>0.50</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. **METHODS OF INSTRUCTION (TYPICAL)**

*Instructors of the course might conduct the course using the following method:*

1. Course material will be presented through class lecture with multi-media visual aids.
2. Instructor and student demonstrations will assist learning goals.
3. Additional studies will be required from the internet, technical manuals and textbooks.

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**
   
   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   a. Weekly reading assignment from textbook, and study for quizzes.
   b. Per term, written introduction 250 words
   c. Per term, written assignment identifying 3 specialized fields that interest you in the fire service.
   d. Per term, submit resume and cover letter
   e. Weekly oral report on "Who is hiring and Job applications".
   f. Per term, conduct Oral interviews in class.
   g. Weekly prepare "Career Binder"
      i. Aspects of oral interviews
      ii. Physical fitness and agility testing.
      iii. Ethics and leadership
   h. Per term, 500 word assignment on personal areas for improvement.

2. **EVIDENCE OF CRITICAL THINKING**

   *Assignments require the appropriate level of critical thinking*

   a. Written 250 word assignment on the word ethics and what it means to you.
   b. Paper on 3 character traits that describe you and why they are important to you, 2 plus pages.
   c. Describe a website, testing Notification Company or an article that provides tips on how to get hired.

F. **TEXTS AND OTHER READINGS (TYPICAL)**

### III. DESIRED LEARNING

**A. COURSE GOAL**

*As a result of satisfactory completion of this course, the student should be prepared to:*

Take Fire Service entry level and promotional examinations, including preemployment requirements. Students are instructed on methods to improve test scores, including lessons on mental attitude, confidence building, resume writing, written test preparation, mechanical aptitude and oral interviews.

**B. STUDENT LEARNING GOALS**

*Mastery of the following learning goals will enable the student to achieve the overall course goal.*

1. **Required Learning Goals**

*Upon satisfactory completion of this course, the student will be able to:*

   a. Identify the fundamental principles of the Fire Service examination process.

   b. Describe the procedures of self evaluation and self improvement.

   c. Analyze and determine the proper strategies to adapt to different Fire Department testing processes.

   d. Research Fire Departments to identify organizational structures that will help students in the testing and oral interview process.

   e. Develop applications and resumes that comply with Fire Department requirements

   f. Compare the systematic approach to examination preparation (SAEP)

   g. Enable the student to pinpoint areas of weakness in terms of NFPA Standard 1001.

   h. Discuss the improved qualifications and standards for Fire and Emergency Medical Service personnel.

2. **Lab Learning Goals**

*Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Identify minimum qualifications and entry-level skills for fire fighter hiring.

   b. The student will be able to describe the following elements: application process, written exam process, physical agility exam, oral interview, chief's interview, background investigation.

   c. Describe the typical fire department's fire fighter probationary process, with the levels of training needed to complete the probationary period.

   d. Diagram an organizational structure of a fire department and describe the rank structure and job requirements for the following positions: fire fighter, engineer, captain, division chief, deputy chief, chief and support staff.

### IV. METHODS OF ASSESSMENT (TYPICAL)

**A. FORMATIVE ASSESSMENT**
1. Written exam
2. Quizzes
3. Written assignments
4. Oral presentations
5. Graded applications and resumes

B. **SUMMATIVE ASSESSMENT**

1. Graded applications and resumes
2. Term paper
3. Final exam
Proposal Impact

FSCI 322 Fire Service Career Development/Promotions
**Course Revision Major**
John Sola

Courses

Cross Listed Courses

Programs

  1. Fire Science Certificate of Achievement *New Program*
FSCI 369 Course Data Summary Report

FSCI 369 - Training Instructor 1C
Action Type: New Course
Effective:
Primary Author: John Sola
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: State Classification: I
SAM Code: Work Experience: Occupational

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>FSCI-369</td>
<td>Lecture</td>
<td>25.20</td>
<td>8.24%</td>
<td></td>
</tr>
<tr>
<td>FSCI-369</td>
<td>Lab</td>
<td>16.20</td>
<td>5.29%</td>
<td></td>
</tr>
<tr>
<td>FSCI-369</td>
<td>Disc</td>
<td>5.40</td>
<td>1.76%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>46.8</td>
<td>15.29%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Fire Training certificate</td>
<td>1</td>
<td>$110</td>
</tr>
<tr>
<td>Student Manual</td>
<td>1</td>
<td>$55</td>
</tr>
</tbody>
</table>

These materials are related to the Student Learning Goals for the course because:

Student manual is necessary for course completion

These items have continuing value because:

State certificate is necessary to advance to the next level of instructor certification. Student manual is a useful resource for current instructional techniques.

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

The course completion necessary for instructor certification is only available through state fire training after
successful completion. The student manual is supplied by state fire training.

Enrollment Restrictions & Advisories

Prerequisite: FSCI 353
I. **OVERVIEW**
The following information will appear in the 2009 - 2010 catalog

FSCI-369  Training Instructor 1C  2 Units

Prerequisite: Satisfactory completion of FSCI 353.

Materials Fee Required

This is the third of a three-course series. Topics include methods and techniques for developing lesson plans, ancillary components, and tests in accordance with the latest concepts in career education. Field trips are not required. Course is not applicable to the associate degree.

II. **LEARNING CONTEXT**

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   a. Orientation and Administration

      i. Calender of Events

      ii. Student Tracking sheet

   b. Methodology

      i. Reasons for lesson plan development

      ii. Sources of reference and materials

      iii. Determining levels of instruction

      iv. Employing the four step method of instruction

   c. Instructional preparation and delivery

      i. Elements of a course outline

      ii. Components of cognitive and psychomotor lesson plans

      iii. Developing student behavioral objectives

      iv. Developing a cognitive lesson plan

      v. Developing a psychomotor lesson plan

      vi. Developing and employing ancillary components

      vii. Selecting and employing audiovisual training aids
viii. Transition techniques within and between training aid devices
ix. Developing audiovisual training aids
x. Procedures used for Evaluating Student teaching demo

d. Testing
  i. Purpose, selection criteria, and elements of testing instruments
  ii. Creating oral, written, and performance tests
  iii. Methods of administering and grading tests instruments

2. **Required Lab Content:**

a. Develop cognitive lesson plan for Students with Special Needs
   i. Training Aids
   ii. Power points demonstration

b. Developing a psychomotor lesson plan for Students with Special needs
   i. Assignment sheets
   ii. Information sheets
   iii. Skills sheets
   iv. Study sheets
   v. Worksheet or activity sheets

c. Procedures used for evaluating student instructor teaching demonstrations
   i. ACID BASE
   ii. Using evaluation forms
      a. Reasons
         a. Reduce subjectivity
         b. Help to ensure consistency
      b. Should include objective evaluation
         a. Classroom management
         b. Proper instructional method for topic
      c. Clear communication of learning objectives
d. Presentation techniques
   a. Verbal communications

d. Creating Testing Instruments, Formative, Summative
   i. Oral, Written, and Performance tests
   ii. Creating an Oral test
   iii. Creating a Multiple-choice written test
   iv. Creating a True-False Written test

e. Methods of administering and grading test instruments.

3. **Recommended Content:**

a. Teaching English Learners and Students with special needs
   i. LEP, Secondary school student, adult or out-of-school youth
   ii. Limited ability to speak, read, write or understand English
   iii. Literacy levels of LEP students

b. Special Designed Academic Instruction in English (SDAIE)
   i. Four major components of SDAIE
      a. Hands-on activities
      b. Visual clues
      c. Cooperative learning
      d. Guarded vocabulary

c. Cleaning and Field Level Maintenance for Audiovisual Training Aid Devices
   i. General care guidelines
   ii. Storage
   iii. Performing basic maintenance

B. **ENROLLMENT RESTRICTIONS**
1. **Prerequisites**

Satisfactory completion of FSCI 353.

2. **Health and Safety Skills/Restrictions**

   Before entering the course, the student must demonstrate the following skill or condition:
   
   a. State Fire Training, Training Instructor 1 A
   
   b. State Fire Training, Training Instructor 1B

C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>25.20</td>
<td>1.40</td>
</tr>
<tr>
<td>Lab</td>
<td>16.20</td>
<td>0.30</td>
</tr>
<tr>
<td>Disc</td>
<td>5.40</td>
<td>0.30</td>
</tr>
</tbody>
</table>

D. **METHODS OF INSTRUCTION (TYPICAL)**

   Instructors of the course might conduct the course using the following method:

   1. Lecture
   
   2. Demonstration of cognitive lesson delivery
   
   3. Illustrated lecture using power point presentations and multi-media aids
   
   4. Guided discussions leading toward subject area goals

E. **ASSIGNMENTS (TYPICAL)**

   1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

      Time spent on coursework in addition to hours of instruction (lecture hours)

      a. Daily reading materials
      
      b. Preparation for exams
      
      c. Per term, Preparation of one cognitive and one psychomotor student-developed lesson plan, using three forms of mulimedia

   2. **EVIDENCE OF CRITICAL THINKING**

      Assignments require the appropriate level of critical thinking

      a. Break up into small groups.

         i. Select critia for evaluation of Student Demonstration

         ii. Creating oral, written, and performance tests.

      b. Develop methods of administrating and grading Test instruments

      c. Students with Special needs
i. Assistive Technology
ii. Academic accommodations
iii. Teaching LEP

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL
As a result of satisfactory completion of this course, the student should be prepared to:

Write and deliver cognitive and psychomotor training lessons using appropriate multi-media. Successful students can apply for California State Fire Training Systems "Training Instructor I", this enables participants the ability to teach California Fire Service Training and Educational System Level I classes.

B. STUDENT LEARNING GOALS
Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals
Upon satisfactory completion of this course, the student will be able to:

   a. Develop cognitive and psychomotor lesson plans and tests in accordance with the latest concepts in career education.
   b. Develop cognitive and psychomotor lesson plans and related supplemental materials.
   d. Develop, receive feedback, and finalize instructional materials to deliver a teaching demonstration.

2. Lab Learning Goals
Upon satisfactory completion of the lab portion of this course, the student will be able to:

   a. Analyze the four step method of instruction.
   b. Determine the level of instruction needed for psychomotor and cognitive lesson plan.
   c. Demonstrate building cognitive lesson plan including and developing a power point presentation.
   d. Demonstrate building psychomotor lesson plan including and developing a power point presentation and multi media aids.
   e. Determine the level of instruction needed for psychomotor and cognitive lesson plan.

IV. METHODS OF ASSESSMENT (TYPICAL)
A. **FORMATIVE ASSESSMENT**
   1. Cognitive lesson plan development
   2. Cognitive lesson plan demonstration
   3. Psychomotor lesson plan development
   4. Psychomotor lesson plan demonstration
   5. Evaluation of student-Created Oral Test
   6. Evaluation of student-prepared Multiple-Choice Test
   7. Written Quiz #1
   8. Written Quiz #2

B. **SUMMATIVE ASSESSMENT**
   1. Final Written Test
Materials Fee

Yes:

Provide a cost breakdown for all items provided for a materials fee. Each item must become "tangible personal property" of the student upon payment of the fee and completion of the course.

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Price</th>
<th>SubTtl</th>
</tr>
</thead>
<tbody>
<tr>
<td>State Fire Training certificate</td>
<td>1</td>
<td>110.00</td>
<td>110.00</td>
</tr>
<tr>
<td>Student Manual</td>
<td>1</td>
<td>55.00</td>
<td>55.00</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>165.00</strong></td>
</tr>
</tbody>
</table>

1) Explain how these materials are related to the Student Learning Goals for the course.
   - Student manual is a necessary for course completion

2) Explain how the materials have continuing value outside the classroom.
   - State certificate is necessary to advance to the next level of instructor certification. Student manual is a useful resource for current instructional techniques

3) Is the amount of material the student receives commensurate with the fee paid AND with the amount of material necessary to achieve the Student Learning Goals for the course AND provided at the district’s actual cost?
   - Yes:

4) If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
   - The course completion necessary for instructor certification is only available through state fire training after successful completion. The student manual is supplied by state fire training.
COURSE INFORMATION AND REQUIRED MATERIALS
PO Box 944246, Sacramento, CA 94244-2460

Course: Training Instructor 1A: Cognitive Lesson Delivery (2009) CFSTES

Hours: 24 lecture hours/1 lab hour per student

Designed For: Personnel preparing for a Company Officer, SFT Registered Instructor, or Training Officer position

Description: This is the first of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching cognitive lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all.

Prerequisites: None

Certification: Fire Officer and Training Instructor

Class Size: Minimum: 16 with one Master Instructor, 25 with additional Master Instructor or qualified Skills Evaluator

Restrictions: None

REQUIRED STUDENT MATERIALS

Fire and Emergency Services Instructor Seventh FPP/IFSTA

REQUIRED INSTRUCTOR MATERIALS

Fire and Emergency Services Instructor Seventh FPP/IFSTA

Instructor Guide 2009 SFT

PowerPoint Slides on CD-ROM (Optional) 2009 SFT

Course Final Exam Current Instructor

VENDORS

FPP/IFSTA
Fire Protection Publications, 930 North Willis, Stillwater, OK 74078-8045
www.ifsta.org 800-654-4055

SFT
State Fire Training Bookstore, PO Box 944246, Sacramento 94244
www.fire.ca.gov 916-445-8158

TRAINING INSTRUCTOR 1A: COGNITIVE LESSON DELIVERY

Course Objectives: To provide the student with...

a) A variety of methods and techniques for training in accordance with the latest concepts in career education.

b) Information to select, adapt, organize, and utilize instructional materials appropriate for teaching cognitive lessons.

c) Criteria and methods to evaluate teaching and learning efficiency.

d) An opportunity to apply major principles of learning through teaching demonstrations.

Course Content:

Unit 1: Introduction
1-1 Orientation And Administration................................................................. 1:00

Unit 2: Instructional Methodology, Adaptation, And Delivery
2-1 Fire And Emergency Services Instruction As It Relates To Cognitive Training........................................ 1:30
2-2 Principles Of Learning .............................................................................. 1:30
2-3 Defining Levels Of Instruction................................................................. 0:30
2-4 Components Of Learning Objectives ...................................................... 1:00
2-5 Employing The Four-step Method Of Instruction As It Relates To Cognitive Training............................ 1:00
<table>
<thead>
<tr>
<th>Unit 2: Training</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>2-6 Assembling And Reviewing Instructional Materials As They Relate To Cognitive Training</td>
<td>0:30</td>
</tr>
<tr>
<td>2-7 Adapting Cognitive Lesson Materials</td>
<td>1:00</td>
</tr>
<tr>
<td>2-8 Legal And Ethical Considerations As They Relate To Cognitive Training</td>
<td>1:30</td>
</tr>
<tr>
<td>2-9 Methods of Instructional Delivery</td>
<td>1:00</td>
</tr>
<tr>
<td>2-10 Presentation Techniques For Cognitive Training</td>
<td>2:00</td>
</tr>
<tr>
<td>2-11 Managing The Learning Environment for Cognitive Training</td>
<td>1:00</td>
</tr>
<tr>
<td>2-12 Selecting And Using Audiovisual Media Equipment</td>
<td>1:30</td>
</tr>
<tr>
<td>2-13 Effective Interpersonal Communications</td>
<td>1:00</td>
</tr>
<tr>
<td>2-14 Student Attitudes And Behaviors</td>
<td>1:00</td>
</tr>
<tr>
<td>2-15 Procedure Used For Evaluating Student Teaching Presentations</td>
<td>1:00</td>
</tr>
<tr>
<td>Unit 3: Testing</td>
<td></td>
</tr>
<tr>
<td>3-1 Introduction To And Administration Of Oral And Written Tests</td>
<td>1:00</td>
</tr>
<tr>
<td>3-2 Student Progress And Testing Feedback</td>
<td>0:30</td>
</tr>
</tbody>
</table>

**Student Instructor Teaching Demonstrations**
- **Formative Tests**: 3:00
- **Certification Exam**: 1:00
COURSE INFORMATION AND REQUIRED MATERIALS
PO Box 944246, Sacramento, CA 94244-2460

Course: Training Instructor 1B: Psychomotor Lesson Delivery (2009) CFSTES
Hours: 24 lecture hours/1 lab hour per student

Designed For: Personnel preparing for a Company Officer, SFT Registered Instructor, or Training Officer position

Description: This is the second of a three-course series. Topics include methods and techniques for training in accordance with the latest concepts in career education; selecting, adapting, organizing, and using instructional materials appropriate for teaching psychomotor lessons; criteria and methods to evaluate teaching and learning efficiency; and an opportunity to apply major principles of learning through teaching demonstrations. Two (2) student instructor teaching demonstrations are required of all.

Prerequisites: Training Instructor 1A
Certification: Fire Officer and Training Instructor

Class Size: Minimum: 16 with one Master Instructor, 25 with additional Master Instructor or qualified Skills Evaluator

Restrictions: None

REQUIRED STUDENT MATERIALS

- Fire and Emergency Services Instructor Seventh FPP/IFSTA

REQUIRED INSTRUCTOR MATERIALS

- Fire and Emergency Services Instructor Seventh FPP/IFSTA
- Instructor Guide 2009 SFT
- PowerPoint Slides on CD-ROM (Optional) 2009 SFT
- Course Final Exam Current Instructor

VENDORS

<table>
<thead>
<tr>
<th>Vendor</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFT</td>
<td>State Fire Training Bookstore, PO Box 944246, Sacramento 94244</td>
<td>916-445-8158</td>
</tr>
</tbody>
</table>

TRAINING INSTRUCTOR 1B: PSYCHOMOTOR LESSON DELIVERY

Course Objectives: To provide the student with...

a) A variety of methods and techniques for training in accordance with the latest concepts in career education.
b) Information to select, adapt, organize, and utilize instructional materials appropriate for teaching psychomotor lessons.
c) Criteria and methods to evaluate teaching and learning efficiency.
d) An opportunity to apply major principles of learning through teaching demonstrations.

Course Content: .........................................................................................................................................40:00

Unit 1: Introduction
1-1 Orientation And Administration...........................................................................................................1:00

Unit 2: Instructional Methodology, Adaptation, And Delivery
2-1 Fire and Emergency Services Instruction As It Relates To Psychomotor Training ..................................1:00
2-2 Employing The Four-step Method Of Instruction As It Relates To Psychomotor Training ............................1:00
2-3 Presenting Psychomotor Instruction ....................................................................................................1:00
2-4 Safety Considerations For Psychomotor Instruction ..................................................................................1:00
2-5 Managing The Learning Environment for Psychomotor Training .............................................................1:00
<table>
<thead>
<tr>
<th>Section</th>
<th>Topic</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-6</td>
<td>Adapting Psychomotor Lesson Materials</td>
<td>2:00</td>
</tr>
<tr>
<td>2-7</td>
<td>Selecting And Using Training Aids</td>
<td>1:00</td>
</tr>
<tr>
<td>2-8</td>
<td>Assembling And Reviewing Instructional Materials As They Relate To Psychomotor Training</td>
<td>2:00</td>
</tr>
<tr>
<td>2-9</td>
<td>Procedure Used For Evaluating Student Teaching Presentations</td>
<td>1:00</td>
</tr>
<tr>
<td>2-10</td>
<td>Legal And Ethical Considerations As They Relate To Psychomotor Training</td>
<td>1:30</td>
</tr>
<tr>
<td></td>
<td><strong>Unit 3: Testing</strong></td>
<td></td>
</tr>
<tr>
<td>3-1</td>
<td>Introduction To And Administration Of Performance Tests</td>
<td>1:30</td>
</tr>
<tr>
<td>3-2</td>
<td>Student Progress And Testing Feedback</td>
<td>2:00</td>
</tr>
<tr>
<td></td>
<td>Student Instructor Teaching Demonstrations</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Formative Tests</td>
<td>3:00</td>
</tr>
<tr>
<td></td>
<td>Course Final Exam</td>
<td>1:00</td>
</tr>
</tbody>
</table>
Course Information and Required Materials

PO Box 944246, Sacramento, CA 94244-2460

Course: Training Instructor 1C: Instructional Development Techniques (2009) CFSTES

Hours: 24 lecture hours/1 lab hour per student

Designed For: Personnel preparing for SFT Registered Instructor or Training Officer position

Description: This is the third of a three-course series. Topics include methods and techniques for developing lesson plans, ancillary components, and tests in accordance with the latest concepts in career education. The course offers the opportunity to develop, receive feedback, and finalize instructional materials and deliver a teaching demonstration. Two (2) student instructor teaching demonstrations are required of all.

Prerequisites: Training Instructor 1A and 1B

Certification: Training Instructor

Class Size: Minimum: None

Maximum: 16 with one Master Instructor, 25 with additional Master Instructor or qualified Skills Evaluator

Restrictions: None

Required Student Materials

<table>
<thead>
<tr>
<th>Required Student Materials</th>
<th>Edition</th>
<th>Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire and Emergency Services Instructor</td>
<td>Seventh</td>
<td>FPP/IFSTA</td>
</tr>
</tbody>
</table>

Required Instructor Materials

<table>
<thead>
<tr>
<th>Required Instructor Materials</th>
<th>Edition</th>
<th>Vendors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fire and Emergency Services Instructor</td>
<td>Seventh</td>
<td>FPP/IFSTA</td>
</tr>
<tr>
<td>Instructor Guide</td>
<td>2009</td>
<td>SFT</td>
</tr>
<tr>
<td>PowerPoint Slides on CD-ROM (Optional)</td>
<td>2009</td>
<td>SFT</td>
</tr>
<tr>
<td>Course Final Exam</td>
<td>Current</td>
<td>Instructor</td>
</tr>
</tbody>
</table>

Vendors

<table>
<thead>
<tr>
<th>Vendors</th>
<th>Address</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>SFT</td>
<td>State Fire Training Bookstore, PO Box 944246, Sacramento 94244 <a href="http://www.fire.ca.gov">www.fire.ca.gov</a></td>
<td>916-445-8158</td>
</tr>
</tbody>
</table>

Training Instructor 1C: Instructional Development Techniques

Course Objectives: To provide the student with...

a) A variety of methods and techniques for developing lesson plans and tests in accordance with the latest concepts in career education.

b) Information to develop cognitive and psychomotor lesson plans and related supplemental materials.

c) Various testing instruments to evaluate teaching and learning efficiency.

d) An opportunity to develop, receive feedback, and finalize instructional materials and deliver a teaching demonstration.

Course Content:...

Unit 1: Introduction
1-1 Orientation And Administration................................................................. 1:00

Unit 2: Methodology
2-1 Reasons For Lesson Plan Development ......................................................... 0:30
2-2 Sources Of References And Materials......................................................... 0:30
2-3 Determining Levels Of Instruction .............................................................. 0:30
2-4 Employing The Four-step Method Of Instruction ........................................... 0:30
2-5 Teaching English Learners And Students With Special Needs ....................... 0:30

Unit 3: Instructional Preparation And Delivery
<table>
<thead>
<tr>
<th>Topic</th>
<th>Duration</th>
</tr>
</thead>
<tbody>
<tr>
<td>3-1 Elements Of A Course Outline</td>
<td>0:30</td>
</tr>
<tr>
<td>3-2 Components Of Cognitive And Psychomotor Lesson Plans</td>
<td>1:00</td>
</tr>
<tr>
<td>3-3 Developing Behavioral Objectives</td>
<td>1:00</td>
</tr>
<tr>
<td>3-4 Developing A Cognitive Lesson Plan (SFT Format)</td>
<td>2:00</td>
</tr>
<tr>
<td>3-5 Developing A Psychomotor Lesson Plan (SFT Format)</td>
<td>1:30</td>
</tr>
<tr>
<td>3-6 Developing And Employing Ancillary Components</td>
<td>1:00</td>
</tr>
<tr>
<td>3-7 Employing Audiovisual Media And Props</td>
<td>0:30</td>
</tr>
<tr>
<td>3-8 Transition Techniques Within And Between Media</td>
<td>1:00</td>
</tr>
<tr>
<td>3-9 Audiovisual Equipment Cleaning And Field Level Maintenance</td>
<td>0:30</td>
</tr>
<tr>
<td>3-10 Developing Audiovisual Media</td>
<td>2:30</td>
</tr>
<tr>
<td>3-11 Procedures For Evaluating Student Instructor Performance</td>
<td>0:30</td>
</tr>
<tr>
<td>Unit 4: Testing</td>
<td></td>
</tr>
<tr>
<td>4-1 Purpose, Selection Criteria, And Elements Of Test Instruments</td>
<td>1:00</td>
</tr>
<tr>
<td>4-2 Methods Of Test Planning</td>
<td>1:00</td>
</tr>
<tr>
<td>4-3 Creating Oral, Written, And Performance Tests</td>
<td>2:00</td>
</tr>
<tr>
<td>4-4 Methods Of Administering And Grading Test Instruments (Oral and Written)</td>
<td>1:00</td>
</tr>
<tr>
<td>Instructional Development Feedback and Finalize</td>
<td>16:30</td>
</tr>
<tr>
<td>Formative Tests</td>
<td>2:00</td>
</tr>
<tr>
<td>Certification Exam</td>
<td>1:00</td>
</tr>
<tr>
<td>Expedited Approval Information</td>
<td></td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td></td>
</tr>
<tr>
<td><strong>What effective date are you requesting?</strong></td>
<td></td>
</tr>
<tr>
<td>2009      Semester: Spring</td>
<td></td>
</tr>
<tr>
<td><strong>Why are you requesting expedited approval?</strong></td>
<td></td>
</tr>
<tr>
<td>To facilitate workforce training demands</td>
<td></td>
</tr>
<tr>
<td><strong>Provide below your written rationale demonstrating imminent need</strong></td>
<td></td>
</tr>
<tr>
<td>We are an accredited academy with CA state fire training, we need to add this course to maintain our state fire training instructor and fire officer programs. We need this program in the spring 09 catalog</td>
<td></td>
</tr>
</tbody>
</table>
Proposal Impact

FSCI 369 Training Instructor 1C
**New Course**
John Sola

Courses

Cross Listed Courses

Programs
GUIDE 109 - International Student/New American Focus

Action Type: Periodic Review

Effective:

Primary Author: Barbara St Urbain

Other Author(s):

CC Representative Approval By:

CC Staff Review By:

Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested

Course Data Elements

Credit Type: Requested

Credit Sub-Type: Requested

TOP Code: SAM Code: State Classification:

Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUIDE-109</td>
<td>Lecture</td>
<td>18.00</td>
<td>3.33%</td>
<td></td>
</tr>
<tr>
<td>GUIDE-109</td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>GUIDE-109</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>18</td>
<td>3.33%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories
Advisory:
I. **OVERVIEW**

The following information will appear in the 2009 - 2010 catalog

GUIDE-109International Student/New American Focus 1 Unit

Formerly listed as: GUIDE - 109: Orientation for Foreign Students

Advisory: Before enrolling in this course, students are strongly advised to have eligibility for ESL 45, 46

Education and career planning for students whose previous education has been outside the United States. Acquaints students with the college, its curriculum, facilities, services, academic regulations, programs, degree and transfer requirements. Reviews extra curricula activities, personal adjustment, American customs, culture shock, and survival techniques. Students must complete a conference with a counselor during the semester. A detailed educational plan is developed. Field trips are not required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   A. Culture shock and survival techniques
   B. American culture and customs
      1. laws and regulations
   C. American educational system
      1. comparison with educational systems in other parts of the world
      2. American classroom culture
   D. Post-secondary education overview and purpose
      1. courses
      2. certificate programs
      3. associate degree programs
      4. baccalaureate programs
   E. Lower division preparation for transfer
      1. general education
      2. preparation for a major
   F. Upper division requirements
      1. major
      2. general education
      3. electives/minor
   G. Extra curricular activities
   H. Educational goals in context of life goals
      1. Life goals
      2. Interests, values, and abilities
   I. Evaluation of educational alternatives
   J. Tentative choice of appropriate educational goal(s)
   K. Skills needed for success
      1. College resources
      2. College services
      3. Time management
      4. Study Skills
   L. Educational planning
      1. Development of an educational plan
      2. Admissions requirements for transfer programs
3. Degree requirements for AA/AS degrees
4. Requirements for certificates

M. Career planning process
   1. Visit to Career Development Center

N. Advising and counseling
   1. Role of advisor
   2. Role of counselor/international counselor
   3. Initiating contact

B. **ENROLLMENT RESTRICTIONS**

1. **Advisories**

   Before enrolling in this course, students are strongly advised to have eligibility for ESL 45, 46

2. **Requisite Skills**

   *Before entering the course, the student will be able to:*

   a. Understand, read and write English at an intermediate level.

C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>18.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. **METHODS OF INSTRUCTION (TYPICAL)**

*Instructors of the course might conduct the course using the following method:*

1. Individual and small group discussion
2. Lecture/discussion
3. Media presentations
4. Structured problem-solving exercises

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   * Time spent on coursework in addition to hours of instruction (lecture hours)*

   * Weekly readings
   * Weekly homework assignments
     * one paper
     * quizzes
   * work on Educational Plan
   * completion of Personal Assessment

2. **EVIDENCE OF CRITICAL THINKING**

   * Assignments require the appropriate level of critical thinking*

   Examine and assess selected reading assignments.
Develop an educational plan based on your career goals.

Discover the student support services available to you on campus

Compare the differences between your home culture and educational systems to those of the United States.

Compare the differences between the career technical pathways and the university preparation pathways to choose which one is best for their respective goals.

Identify on-line resources such as CSU Mentor, ASSIST, UCOP and others to use with your educational and career goal planning.

Examine your own experiences of assimilation and adjustment into the American culture.

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL

As a result of satisfactory completion of this course, the student should be prepared to:

Create an educational plan based on their academic and career goal and better understand and work within the American culture and educational system.

B. STUDENT LEARNING GOALS

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals

   Upon satisfactory completion of this course, the student will be able to:

   a. Describe the role of community colleges in the context of post high school educational opportunities, including the philosophy and purpose of the various curricula offered.

   b. Describe important aspects of American culture and customs and how to adjust to or cope with them.

   c. Understand the concept of culture shock and be able to apply that concept to experiences in his/her own life.

   d. Describe the values central to the American culture.

   e. Describe and understand the complex American academic system and compare it to their own academic system.

   f. Identify the transfer requirements and procedures to the CSU and UC systems as well as private universities.
g. Identify the requirements needed to earn an associate degree and/or certificate from Modesto Junior College.

h. Examine the college catalogue and schedule of courses to find pertinent information for their academic course of study.

i. Select the appropriate student services available to them at the college that meet their personal and academic needs.

j. Develop an accurate Educational Plan that fits their academic and career goals.

k. Identify the role of counseling, make an appointment and complete an advising session with a counselor.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Problem-solving exercises
2. Class participation
3. Quizzes
4. Written assignments

B. SUMMATIVE ASSESSMENT

1. Educational plan
2. Conference with instructor
3. Final quiz
Proposal Impact

GUIDE 109 International Student/New American Focus
**Periodic Review**
Barbara St Urbain

Courses

Cross Listed Courses

Programs
GUIDE 110 Course Data Summary Report

Modesto Junior College

GUIDE 110 - Educational Planning
Action Type: Course Revision Minor
0.5 Unit
Effective:
Primary Author: Eric Ivory
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status
CSU Transfer: Requested

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code:
State Classification:
Open Entry/Open Exit: No  Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUIDE-110</td>
<td>Lecture</td>
<td>9.00</td>
<td>3.33%</td>
<td></td>
</tr>
<tr>
<td>GUIDE-110</td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>GUIDE-110</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>9</td>
<td>3.33%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
I. **OVERVIEW**

The following information will appear in the 2009 - 2010 catalog

**GUIDE-110 Educational Planning** 0.5 Unit

Acquaints MJC students with the college, its curriculum, facilities, services, academic regulations, vocational and certificate programs, degree and transfer requirements. Students must complete a conference with a counselor during the semester. An educational plan is developed according to each student's needs and goals. Field trips are not required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   A. Post secondary educational overview and purpose
      1. Lifelong learning
      2. Vocational training
         a. courses
         b. certificate programs
         c. associate degree programs
         d. baccalaureate programs
      3. Lower division preparation for transfer
         a. general education
         b. preparation for a major
      4. CA system of higher education
         a. Community College
         b. CSU/UC
         c. Independent
   B. Educational goals in context of life goals
   C. Tentative choice of appropriate educational goal(s)
   D. Skills needed for success
      1. Approaches to learning
      2. Time management
      3. Study skills
      4. Library and research skills
      5. Using college resources effectively
      6. Using online resources
   E. Educational planning
      1. The campus(es) and its resources and services
      2. Educational alternatives and associated requirements
         a. courses and prerequisites (including testing)
         b. certificate programs
         c. vocational programs
         d. transfer programs
         e. competencies
         f. admissions requirements for transfer programs
      3. Developing a detailed educational plan

B. **HOURS AND UNITS**
**METHODS OF INSTRUCTION (TYPICAL)**

Instructors of the course might conduct the course using the following method:

1. Lecture/discussion
2. Individual and small group discussion
3. Media presentations
4. Structured problem-solving exercises
5. Online instruction
6. Guest speakers

**ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**
   
   Time spent on coursework in addition to hours of instruction (lecture hours)

   - Daily or weekly readings
   - Daily or weekly homework assignments
   - Daily or weekly on-line research on related topics
   - Daily or weekly quizzes

2. **EVIDENCE OF CRITICAL THINKING**
   
   Assignments require the appropriate level of critical thinking

   - Students will examine and assess selected readings
   - Students will develop an educational plan based on their career goals
   - Students will discover and use various learning resources and student support services available to them on campus
   - Students will compare the differences between the career technical education pathway and the university preparation pathway to choose which one is best for their respective goals
   - Students will identify on-line resources such as csumentor, assist, ucop and others to use with their educational and career goals

**TEXTS AND OTHER READINGS (TYPICAL)**


3. Other: http://www.cccco.edu
   http://csumentor.edu
   http://ucop.edu
   http://aicc.edu
   http://assist.org
   http://fafsa.edu.gov
   http://eureka.org
III. DESIRED LEARNING

A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:

   Demonstrate knowledge of MJC regulations, procedures, and curricula requirements including certificate, vocational degrees, and transfer degree programs. Create a detailed personal, educational, and career plan to follow towards their educational objective.

B. STUDENT LEARNING GOALS
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals
   Upon satisfactory completion of this course, the student will be able to:

   a. Summarize the role of community colleges in the context of post high school educational opportunities
   b. Identify their educational goals in the context of their life goals.
   c. Identify the skills needed to be successful in college and how to obtain them.
   d. Identify MJC regulations, procedures, and curricula requirements, including certificate, vocational degree, and transfer requirements.
   e. Complete a detailed Educational Plan based on current educational objectives.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

   1. Class participation
   2. Written assignments
   3. Quizzes on daily or weekly lectures
   4. In class participation during group work and discussion
   5. Problem-solving exercises

B. SUMMATIVE ASSESSMENT

   1. Student Educational plan
   2. Conference with a counselor
   3. Written assignments
Technology Mediated Instruction (T.M.I.) Form

PREPARED BY: Eric Ivory

DATE SUBMITTED:

COURSE PREFIX AND NUMBER: GUIDE 110
COURSE TITLE: Educational Planning

METHOD OF INSTRUCTION

ONLINE COURSE All class time is done online. Students must have access to a computer with individual e-mail account and access to the World Wide Web. Course has no on-campus meetings.

TYPE OF TEACHING MODALITIES

<table>
<thead>
<tr>
<th>TEACHING MODALITIES</th>
<th>TEACHING MODALITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Telephone Contact</td>
<td>Web or Computer-based Activities</td>
</tr>
<tr>
<td>E-mail</td>
<td>Written Assignments</td>
</tr>
<tr>
<td>Asynchronous Discussion</td>
<td>Reading Online Materials</td>
</tr>
<tr>
<td>Viewing Text-based Materials</td>
<td>Other Assigned Readings</td>
</tr>
<tr>
<td></td>
<td>Quizzes, Self-test and Exams</td>
</tr>
</tbody>
</table>

COURSE ANALYSIS

1. Describe how methods selected will insure appropriate instructor/student contact as required by Title 5. Allowing students to participate in asynchronous discussion allows for a more open discussion and will likely increase instructor-student interaction. The addition of Computer or Web-based activities allows for faculty to require mastery of certain skills. Instructors are able to observe the progress of the students and can modify lecture or office hour time according to student needs.

2. Describe how the methods selected will allow students to meet the student learning goals of the course. Online Guide 110 instructors use a variety of tools to ensure that the instructor and students have adequate contact during the course. For instance, instructors often ask students to e-mail and/or call with questions and concerns. Instructors and students often use asynchronous "chat rooms" and discussion boards to share knowledge. Many instructors post virtual office hours. Moreover, instructors can verify that students enter into the WEBCT and complete assignments on a regular basis.

3. Are the methods of evaluation different from those listed on the approved course outline? If so, in what ways do they differ? No, the methods of evaluation are the same as listed on the course outline.
Proposal Impact

GUIDE 110 Educational Planning
**Course Revision Minor**
Eric Ivory

Courses

1. ARCH 100 *Pending*
2. ARCH 100 *Active*
3. BUSAD 100 *Pending*
4. BUSAD 100 *Active*
5. ENGR 100 *Pending*

Cross Listed Courses

Programs

1. Human Services Certificate of Achievement *New Program*
GUIDE 111 - Career Awareness

Action Type: Course Revision Major
Effective:
Primary Author: Alida Garcia
Other Author(s): 
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification:
Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUIDE-111</td>
<td>Lecture</td>
<td>18.00</td>
<td>6.67%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>18</td>
<td>6.67%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Interest Inventory</td>
<td>1</td>
<td>$10</td>
</tr>
<tr>
<td>Myers Briggs Type</td>
<td>1</td>
<td>$8</td>
</tr>
</tbody>
</table>

These materials are related to the Student Learning Goals for the course because:

The career assessments are necessary to review with each student to explore the different career occupations they may want to consider for the future. The assessments also provide the base for the student's educational plan.

These items have continuing value because:

The career assessments are for students to continue researching and exploring on-line or through the career center. Students can discuss results in future counseling appointments if they have questions or want to investigate new fields of study.
If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

For all the students in the class to take the career assessments during the same time period it is necessary for them to pay the fees through the college. If they were to pay on their own it could delay the student learning goals of the class.
I. **OVERVIEW**

The following information will appear in the 2009 - 2010 catalog

**GUIDE-111 Career Awareness**

**Materials Fee Required**

Assists students in exploring career alternatives through development of skills necessary for the research, selection and planning of a life-long career. The role of attitudes, interests, values and skills will be addressed. Interests, aptitude and values tests may be used. Important aspects of occupational choice will be covered along with occupational information. An educational plan will be developed. Students must complete a conference with a counselor during the semester. Field trips are not required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

**A. COURSE CONTENT**

1. **Required Content:**

   A. Personal assessment (values, aptitudes, interests, skills, lifestyle preferences). This may include the use of test instruments.
   B. Approaches to career planning and decision-making.
   C. Occupational factors and socio-economic factors (hours, salaries, work environment, etc.)
   D. Labor market trends.
   E. Sources of occupational information.
   F. Decision-making skills.
   G. Educational planning
      1. Resources and services
      2. Educational alternatives and their requirements
         a. courses and prerequisites
         b. certificate, vocational and transfer programs
         c. graduation requirements
         d. transfer admission requirements
      3. Develop a detailed educational plan

**B. HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>18.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

**1 Units**

**C. METHODS OF INSTRUCTION (TYPICAL)**

Instructors of the course might conduct the course using the following method:

1. Class lecture/discussions
2. Classroom exercises
3. Audio-visual presentations
4. Guest speakers
5. Present a problem-solving approach to developing career alternatives and analyzing their merits.
6. Present research methods in relation to decision-making and critical analysis of career alternatives.
7. Supervised class projects (e.g. Career Center research)

D. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS
   Time spent on coursework in addition to hours of instruction (lecture hours)
   a. Daily or weekly reading assignments.
   b. Daily or weekly homework assignments.
   c. Daily or weekly research or career assessments.

2. EVIDENCE OF CRITICAL THINKING
   Assignments require the appropriate level of critical thinking
   Students do research and write a report on a career of their choice to include education needed, beginning salary, expected job growth and the schools that offer that major. Students will examine and assess selected readings. Students will identify on-line resources such as csumentor, assist, ucop and others to use with their educational and career goals. Students will develop an educational plan based on their career goals.

E. TEXTS AND OTHER READINGS (TYPICAL)


2. Other: EUREKA career descriptions
   Myers Briggs Type Indicator
   Strong Interest Inventory

III. DESIRED LEARNING

A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:
   Identify the important variables to be considered when choosing a career, to include identifying the career, decision-making methods, gathering information about career choices and alternatives. Demonstrate the knowledge of MJC regulations, procedures, and curricula requirements including certificate, vocational degree, and transfer degree programs. Develop a detailed educational plan.

B. STUDENT LEARNING GOALS
   Mastery of the following learning goals will enable the student to achieve the overall course goal.
   1. Required Learning Goals
      Upon satisfactory completion of this course, the student will be able to:
a. Identify the important variables to be considered when choosing a career. (Students’ interests, values, skills/aptitude and life goals.)

b. Identify career planning and decision-making methods.

c. Analyze information about career choices and alternatives.

d. State the role of community colleges in the context of post high school educational opportunities.

e. Know MJC regulations, procedures, and curricula requirements including certificate, associate degrees, and transfer requirements.

f. Create and analyze educational goals in the context of life goals, abilities, interests, values, career choices, and alternatives.

g. Write a detailed educational plan.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Class participation

2. Strong Interest Inventory

3. Myers Briggs Type Indicator

4. Problem-solving exercises

5. Written assignments and research

6. Educational planning worksheet

B. SUMMATIVE ASSESSMENT

1. Educational plan

2. Conference with counselor
Materials Fee

Yes:

Provide a cost breakdown for all items provided for a materials fee. Each item must become "tangible personal property" of the student upon payment of the fee and completion of the course.

<table>
<thead>
<tr>
<th>Item</th>
<th>Qty</th>
<th>Price</th>
<th>SubTtl</th>
</tr>
</thead>
<tbody>
<tr>
<td>Strong Interest Inventory</td>
<td>1</td>
<td>10.00</td>
<td>10.00</td>
</tr>
<tr>
<td>Myers Briggs Type</td>
<td>1</td>
<td>8.00</td>
<td>8.00</td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td></td>
<td>18.00</td>
</tr>
</tbody>
</table>

1) Explain how these materials are related to the Student Learning Goals for the course.

The career assessments are necessary to review with each student to explore the different career occupations they may want to consider for the future. The assessments also provide the base for the student's educational plan.

2) Explain how the materials have continuing value outside the classroom.

The career assessments are for students to continue researching and exploring on-line or through the career center. Students can discuss results in future counseling appointments if they have questions or want to investigate new fields of study.

3) Is the amount of material the student receives commensurate with the fee paid AND with the amount of material necessary to achieve the Student Learning Goals for the course AND provided at the district's actual cost?

Yes:

4) If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

For all the students in the class to take the career assessments during the same time period it is necessary for them to pay the fees through the college. If they were to pay on their own it could delay the student learning goals of the class.
Proposal Impact

GUIDE 111 Career Awareness
**Course Revision Major**
Alida Garcia

Courses

1. ARCH 100 *Pending*
2. ARCH 100 *Active*
3. ENGR 100 *Pending*

Cross Listed Courses

Programs
GUIDE 112 - Job Hunting Skills

Action Type: Course Revision Major
Effective:
Primary Author: Dean Tsuruda
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification:
Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUIDE-112</td>
<td>Lecture</td>
<td>9.00</td>
<td>3.33%</td>
<td></td>
</tr>
<tr>
<td>GUIDE-112</td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>GUIDE-112</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>9</td>
<td>3.33%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

GUIDE-112 Job Hunting Skills
Formerly listed as: GUIDE - 112: Job Employment Skills
Realities of the job market and techniques for conducting a successful job search. Emphasis on learning about job application procedures, resume writing and interviewing skills. Students must complete an appointment with a counselor during the semester. Course is repeatable - two completions allowed. Field trips are not required. Course is not applicable to the associate degree.

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT
1. Required Content:
   a. Desired employee characteristics for obtaining a job.
   b. The job market; current trends, industry make-up, and factors which can affect opportunities.
   c. Sources and resources for uncovering and developing job opportunities.
   d. Application, resume and interviewing procedures.
   e. Educational planning: post-secondary overview and review.

2. Recommended Content:
   a. Career development.
   b. How to keep and maintain employment.

B. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>9.00</td>
<td>0.50</td>
</tr>
<tr>
<td>Lab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

C. METHODS OF INSTRUCTION (TYPICAL)
Instructors of the course might conduct the course using the following method:

1. Lecture/Discussion
2. Individual and small group discussion
3. Media presentations
4. Structured problem solving exercises
5. Analysis and preparation of a written summary of goals, achievements, and experiences in a resume format.
6. Presentation of a simulated job interview.

D. ASSIGNMENTS (TYPICAL)

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**
   *Time spent on coursework in addition to hours of instruction (lecture hours)*
   - Daily or weekly readings.
   - Daily or weekly homework assignments.
   - Daily or weekly on-line research on related topics.

2. **EVIDENCE OF CRITICAL THINKING**
   *Assignments require the appropriate level of critical thinking*
   - Discover and use the various resources available for job hunting.
   - Compare various resume formats.
   - Develop a cover letter and resume format appropriate to you.
   - Develop a complete an educational plan.
   - Examine and assess selected readings.
   - Demonstrate your ability to handle a job interview.

E. **TEXTS AND OTHER READINGS (TYPICAL)**


III. **DESIRED LEARNING**

A. **COURSE GOAL**
   *As a result of satisfactory completion of this course, the student should be prepared to:*
   
   Describe the job hunting process as consisting of three phases; job preparation, job application and job interviewing. The student will also be able to complete an educational plan.

B. **STUDENT LEARNING GOALS**
   *Mastery of the following learning goals will enable the student to achieve the overall course goal.*

1. **Required Learning Goals**
   *Upon satisfactory completion of this course, the student will be able to:*
   
   a. Summarize the desirable characteristics employers want from employees.
   
   b. Identify the factors, which affect the job market and job market opportunities.
   
   c. Tell how to uncover information about job opportunities.
   
   d. Practice skills to write a resume, fill out a job application, and write a letter of application (cover letter).
e. Describe the process for conducting a job hunt.

f. Write a detailed educational plan.

g. Demonstrate the skills for conducting a successful interview.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Class Participation

2. Written assignments and research

3. Simulation exercises

B. SUMMATIVE ASSESSMENT

1. Educational planning form

2. Appointment with counselor
Proposal Impact

GUIDE 112 Job Hunting Skills
**Course Revision Major**
Dean Tsuruda

Courses

Cross Listed Courses

Programs
GUIDE 116 - Orientation for Re-Entry Adults

Action Type: Periodic Review
Effective:
Primary Author: Ronald Tingley
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code:  SAM Code:  State Classification:  
Open Entry/Open Exit: No  Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>GUIDE-116</td>
<td>Lecture</td>
<td>18.00</td>
<td>3.33%</td>
<td></td>
</tr>
<tr>
<td>GUIDE-116</td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>GUIDE-116</td>
<td>Disc</td>
<td>18.00</td>
<td>3.33%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>36</td>
<td>6.66%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)

Enrollment Restrictions & Advisories
I. **OVERVIEW**  
The following information will appear in the 2009 - 2010 catalog

GUIDE-116 *Orientation for Re-Entry Adults*  
*Advisory:* Before enrolling in this course, students are strongly advised to speak, write, and understand the English language.

Designed to help new or returning adult students be successful in college after having been out of school for a number of years. Acquaints students with college services, programs, and requirements, and numerous topics related to academic and career success. These topics include adult transitions, self exploration, educational planning, study skills, time management, learning styles, goal setting, career exploration, and other topics related to student success. Students must complete a conference with a counselor during the semester. An educational plan will be developed based on student's academic and career goals. Field trips are not required. Course is applicable to the associate degree.

II. **LEARNING CONTEXT**  
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

- **1. SELF EXPLORATION**
  - a. Adult life transitions, life changes
  - b. Influences on development of the self and self-esteem
  - c. Social support, family support, relationship issues
  - d. College experiences as part of the process of growth

- **2. STUDENT SUCCESS SKILLS**
  - a. Motivation
  - b. Study Skills
  - c. Time Management
  - d. College Resources and Student Services
  - e. Learning Styles

- **3. EDUCATIONAL PLANNING**
  - a. MJC policies and procedures
  - b. MJC graduation requirements
  - c. California college systems and degrees
  - d. MJC degrees and certificate programs and requirements
  - e. Transfer programs and requirements
  - f. General education
  - g. Majors and areas of emphasis
  - h. Use of technology such as ASSIST

- **4. LIFE PLANNING**
  - a. Life planning processes
  - b. Values
  - c. Goal setting
  - d. Decision-making

- **5. CAREER EXPLORATION**
  - a. Career assessment inventories
b. Importance of Interests, Values, Aptitudes, and Personality
c. Career resources

B. ENROLLMENT RESTRICTIONS

1. Advisories

Before enrolling in this course, students are strongly advised to speak, write, and understand the English language.

2. Requisite Skills

Before entering the course, the student will be able to:

a. Speak, write, read and understand the English language

C. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>18.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Lab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disc</td>
<td>18.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

D. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Lecture/discussion
2. Large and small group discussions
3. Media presentations
4. Structured problem-solving exercises
5. Guest speakers
6. Interactive exercises and games

E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS

Time spent on coursework in addition to hours of instruction (lecture hours)

Reading assignments will be given at least once a week. These will consist of chapters in a student success textbook or articles handed out by the instructor.

Writing assignments will be given in which the students will develop their knowledge and skills in the areas of academic and life success. These assignments may include self-development topics such as influential life experiences, relationship issues, career and life goals, and self-esteem issues. Academic topics may include writing a practice essay, note-taking, or goal setting.
Other assignments may be given (if the instructor chooses) that allow the student to learn in more creative, hands-on, non-written ways, to accommodate a variety of learning styles. These assignments may include making a collage of your life goals, making a weekly time schedule, doing a Eureka career exploration online, or completing some math game worksheets to brush up on basic math skills.

Students will be required to complete at least 6 written or hands-on assignments during the semester.

Students will be required to complete one accurate Educational Plan by the end of the semester.

2. EVIDENCE OF CRITICAL THINKING
   Assignments require the appropriate level of critical thinking
   Examine and assess selected readings and explain how the ideas could be implemented in their own lives.
   Develop an Educational Plan based on their career and life goals.
   Discover the various learning resources and student support services available to them on the east and west campuses.
   Develop problem-solving skills when presented with a scenario in which they must evaluate various choices or propose alternative solutions.
   Students will demonstrate their ability to clarify their goals, evaluate their choices, realistically assess their skills and interests, and plan for their future, through written assignments and participation in structured class activities.

F. TEXTS AND OTHER READINGS (TYPICAL)
   2. Other: Myers Briggs Type Indicator
   3. Other: Student Success textbook as selected by instructor.

III. DESIRED LEARNING

   A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:
   Develop an accurate educational plan based on the student's educational goals. Develop, analyze, and specify their educational goals in the context of life goals, abilities, interests and values. Utilize the skills needed to be successful in college and their future life planning. Demonstrate knowledge of MJC regulations, procedures, and curricula requirements including certificate, vocational degree, and transfer degree programs.

   B. STUDENT LEARNING GOALS
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

   1. Required Learning Goals
   Upon satisfactory completion of this course, the student will be able to:
   a. Develop, analyze, and specify their educational goals in the context of life goals, abilities, interests, and values.
   b. Demonstrate the skills needed to be successful in college and in their future life planning.
c. Demonstrate knowledge of MJC regulations, procedures, and curricula requirements including certificate, vocational degree, and transfer degree programs.

d. Create an accurate Educational Plan based on the student's educational goals.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Class activities and discussions
2. Problem-solving exercises
3. Written assignments
4. Educational planning worksheets

B. SUMMATIVE ASSESSMENT

1. Written assignments
2. Educational Plan
3. Conference with instructor
Proposal Impact

GUIDE 116 Orientation for Re-Entry Adults
**Periodic Review**
Ronald Tingley

Courses

Cross Listed Courses

Programs
INTEC 203 - Industrial Mechanical/Pneumatic Components and Equipment  

Action Type: Course Revision Minor  

Effective:  

Primary Author: Jon Kropp  

Other Author(s):  

CC Representative Approval By:  

CC Staff Review By:  

Division Dean Approval By:  

| Rationale for Course Action |

| Transfer and GE Status |

  CSU Transfer: Requested  

| Course Data Elements |

  Credit Type: Requested  

  Credit Sub-Type: Requested  

  TOP Code: 0945.00  

  SAM Code:  

  State Classification: I  

  Open Entry/Open Exit: No  

  Work Experience: No  

| Instructor Load |

| Item Name | Quantity | Cost |

  These materials are related to the Student Learning Goals for the course because:  

  These items have continuing value because:  

  If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
Modesto Junior College
Course Outline of Record
INTEC 203

I. O VERVIEW
The following information will appear in the 2009 - 2010 catalog

INTEC-203 Industrial Mechanical/Pneumatic Components and Equipment 3 Units
Formerly listed as: INTEC - 203: Industrial Mechanical Components and
An introduction to fluid power, power transmission, and other common mechanical components and
equipment found in the manufacturing and processing industry. Content includes basic terminology,
operation, calculations, installation, and maintenance of individual components as well as systems. Field
trips might be required. Course is applicable to the associate degree.

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the
goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:
   a. Industrial safety in the workplace
   b. Calculations
   c. Rigging
   d. Lifting
   e. Ladders
   f. Fluid power principles
   g. Fluid power components and systems
   h. Power transmission
   i. Lubrication
   j. Bearings
   k. Flexible belt drives
   l. Mechanical drives
   m. Basic electricity

2. Required Lab Content:
   a. Ladder safety
   b. Computer based tutorials
i. Power transmission Physics

ii. Basic electricity

iii. Shaft couplings

c. Bearings
   i. Identification
   ii. Installation
   iii. Clearance & runout

d. Mechanical drive principles and components

e. 6 basic machines
   i. Lever
   ii. Wheel & axle
   iii. Pulley
   iv. Lever
   v. Wedge
   vi. Screw

f. Gear motor
   i. Install
   ii. Connect
   iii. Operate
   iv. Identify and measure soft-foot, shim requirements

g. Belt drive
   i. Install
   ii. Align
   iii. Adjust and tension
   iv. Measure and adjust speed

h. Apply mechanical principles

i. Shaft systems
   i. Collinear shafts
      a. Install
b. Adjust

c. Align

d. Identify types of misalignment

ii. Perpendicular offset shafts
   a. Install
   b. Adjust
   c. Align

j. Calculate drive ratios

k. Lubrication
   i. Fundamentals
   ii. Terms
   iii. Oils
   iv. Greases

l. Introduction to pneumatics
   i. Symbology and component identification
   ii. Component connection
   iii. Air conditioning and distribution equipment
   iv. Pressure vs force
   v. Pressure vs volume
   vi. Pressure drop vs flow
   vii. Vacuum generation
   viii. Directional control valves
   ix. Directional and speed control of cylinders
   x. Cylinders in series
   xi. Cylinders in parallel
   xii. Indirect control/pilot operated valves
   xiii. Motor circuits
   xiv. Motor performance
3. **Recommended Content:**

   a. Precision Measurement  
   b. Printreading  
   c. Tools and tool safety  
   d. Hydraulic principles  
   e. Hydraulic applications  
   f. Pumps and piping  
   g. Vibration

B. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>36.00</td>
<td>2.00</td>
</tr>
<tr>
<td>Lab</td>
<td>54.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

C. **METHODS OF INSTRUCTION (TYPICAL)**  
Instructors of the course might conduct the course using the following method:

1. Classroom lecture.  
2. Computer based tutorials.  
3. Equipment & technology demonstrations.  
4. Laboratory demonstrations and exercises.  
5. Video presentations.  
6. Plant visits.  
7. Guest speakers.

D. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**  
   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   Weekly homework/chapter reading.  
   Weekly workbook assignments.  
   Out-of-class laboratory preparation (reading) prior to lab exercises.  
   Final exam preparation and study.

2. **EVIDENCE OF CRITICAL THINKING**  
   *Assignments require the appropriate level of critical thinking*

   Complete the equation: \( Input \text{ Moment Arm} \times Input \text{ Force} = Output \text{ Moment Arm} \times \Box \).
a. Input force  
b. Output force  
c. Input moment\(^2\)  
d. Output moment\(^2\)

If a block and tackle system has 4-part reeving then the output force will be:

a. \(\frac{1}{4}\) of the magnitude of the input force  
b. Four times the magnitude of the input force  
c. \(\frac{1}{2}\) of the magnitude of the input force  
d. Twice the magnitude of the input force

Complete the formula: \(\mu = \frac{F}{\text{_______}}\).

a. N, the normal force  
b. \(x\), the magnitude  
c. RPM  
d. The coefficient of friction

A directional control valve with two flow-path configurations and three fluid ports is referred to as a:

a. 3-way, 2-position directional control valve  
b. 2-way, 3-position directional control valve  
c. 2-way, 2-position directional control valve  
d. 3-way, 3-position directional control valve

When calculating the total piston area for the rod end (annular area) of a cylinder:

a. The rod area must be added to the piston area  
b. The rod area must be subtracted from the piston area  
c. The piston area must be subtracted from the rod area  
d. The piston area must be added to the rod area

A flow control valve consists of:

a. A needle valve and a check valve connected in series  
b. A needle valve and a check valve connected in parallel  
c. A shutoff valve and a check valve connected in series  
d. A shutoff valve and a check valve connected in parallel

A torque of \(\text{_______}\) lb-ft is produced when a 75 lb force is applied to the end of a 3-foot lever arm.

a. 25  
b. 250  
c. 225  
d. 255

How many horsepower are required to lift a 500 lb load a distance of 12 feet in 5 seconds?

a. About 10.9 Hp  
b. About 1200 Hp  
c. About 2.18 Hp

E. TEXTS AND OTHER READINGS (TYPICAL)


3. **Manual:** Kropp / MJC. INTEC 203 Lab Manual. MJC Duplicating

4. **Other:** Industrial Pneumatic Technology, Bulletin 0275-B1, Parker Hannifin Corporation (optional)

III. DESIRED LEARNING

A. **COURSE GOAL**

As a result of satisfactory completion of this course, the student should be prepared to:

Perform calculations to determine area, volume, load, force, pressure, rate, velocity, speed, acceleration, 
D/d ratio, load capacity, loss factors, work, power, torque and horsepower. Correctly interpret component 
symbology, identify select and assemble mechanical and pneumatic components. Describe and 
experimentally verify the operation of components and equipment that demonstrate principles related to 
the course topics.

B. **STUDENT LEARNING GOALS**

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. **Required Learning Goals**

Upon satisfactory completion of this course, the student will be able to:
a. Perform mathematical calculations to determine area, volume, load, force, pressure, rate, velocity, speed, and acceleration.

b. Perform pneumatic calculations using the appropriate gas laws.

c. Perform calculations to determine work, power, horsepower, and torque.

d. Identify hardware components and perform lifting calculations to determine safe loading using D/d ratio, load capacity, and appropriate loss factors.

e. Identify the types, properties, limitations, and applications of various industrial lubricants. Identify bearing types and lubrication techniques commonly used in power transmission applications.

f. Identify types, characteristics, and common applications of mechanical drive components including bearings, v-belts, synchronous belts, chains, gears, couplings, brakes, and transmissions.

2. **Lab Learning Goals**

   Upon satisfactory completion of the lab portion of this course, the student will be able to:

a. Perform calculations using the appropriate gas laws.

b. Identify the types, properties, limitations, and applications of various industrial lubricants. Identify bearing types and lubrication techniques commonly used in power transmission applications.

c. Safely install, assemble and operate mechanical drive components including bearings, v-belts, synchronous belts, chains, gears, couplings, brakes, and transmissions.

d. Applying basic pneumatic principles, read a schematic diagram, safely assemble, operate and troubleshoot a simple pneumatic system that includes filters, accumulators, piping, valves, cylinders, and pneumatic motors.

IV. **METHODS OF ASSESSMENT (TYPICAL)**

A. **FORMATIVE ASSESSMENT**

1. Hands-on laboratory exercises that demonstrate and reinforce the fundamental principles of each course topic.

2. Computer based tutorials that demonstrate and reinforce the fundamental principles of selected course topics.

3. Lab unit quizzes.

B. **SUMMATIVE ASSESSMENT**

1. Computer based tutorials that demonstrate and reinforce the fundamental principles of selected course topics.

2. Hands-on laboratory exercises that demonstrate and reinforce the fundamental principles of each course topic.

3. Written examinations that require the students to demonstrate competencies.

4. Written homework assignments requiring the student to demonstrate knowledge of terminology and mastery of calculations.
Proposal Impact

INTEC 203 Industrial Mechanical/Pneumatic Components and Equipment
**Course Revision Minor**
Jon Kropp

Courses

1. INTEC 205 *Active*

Cross Listed Courses

Programs

1. General Plant Maintenance Certificate of Achievement *New Program*
2. Industrial Electronics Certificate of Achievement *New Program*
3. Industrial Electronics A.S. Degree *New Program*
4. Industrial Technology - Maintenance Certificate of Achievement *New Program*
5. Industrial Technology - Systems A.S. Degree *New Program*
6. Maintenance Electrician A.S. Degree *New Program*
7. Maintenance Electrician A.A. Degree Major *New Program*
8. Maintenance Electrician Certificate of Achievement *New Program*
MATH 101 - Mathematical Ideas and Applications

Action Type: Course Revision Major
Effective:
Primary Author: James Johnson
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested
UC Transfer: Requested
CSU-GE Category: CSU-GE - B4 Requested
IGETC Category: IGETC - 2M Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: A
Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-101</td>
<td>Lecture</td>
<td>54.00</td>
<td>20%</td>
<td></td>
</tr>
<tr>
<td>MATH-101</td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>MATH-101</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>54</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
Enrollment Restrictions & Advisories

Prerequisite: MATH 90
I. **OVERVIEW**  
The following information will appear in the 2009 - 2010 catalog

**MATH-101 Mathematical Ideas and Applications**  
3 Units

**Prerequisite:** Satisfactory completion of MATH 90 or equivalent placement by MJC assessment process.

A general education course emphasizing the role of mathematics in civilization, the nature of mathematical thought, and applications of mathematics. Field trips are not required. Course is applicable to the associate degree. General Education:

- CSU-GE - B4
- IGETC Category: IGETC - 2M

II. **LEARNING CONTEXT**  
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

**A. COURSE CONTENT**

1. **Required Content:**

   a. Mathematical reasoning and problem solving.

   b. The role of mathematics in civilization:

      i. Development of mathematical concepts

      ii. Significant questions leading to new mathematical developments

      iii. Contributions of various individuals and cultures to modern mathematics

   c. Mathematical content areas - at least four will be studied:

      i. Number concepts and numeration systems

      ii. Euclidean and non-Euclidean geometry

      iii. Number theory

      iv. Probability and statistics

      v. Linear programming and the Simplex Method

      vi. Group theory

      vii. Markov chains and Matrix Theory

      viii. Combinatorics

      ix. Graphs and networks

      x. Voting theory
xi. Cryptanalysis
xii. Mathematics of art and music
xiii. Analytic geometry and calculus
xiv. Mathematics of finance
xv. Set theory and Venn diagrams
xvi. Symbolic logic and truth tables
xvii. Other topics (with approval of the course supervisory committee)

B. ENROLLMENT RESTRICTIONS

1. Prerequisites

Satisfactory completion of MATH 90 or equivalent placement by MJC assessment process.

2. Requisite Skills

Before entering the course, the student will be able to:

a. Graph lines and find the equation of a line, given sufficient information.
b. Effectively use function notation to describe mathematical relationships.
c. Determine the domain and range of a given function.
d. Given a relation between two variables, determine if the relation is a function.
e. Graph linear, quadratic, absolute value, and simple cubic functions using transformations.
f. Solve systems of linear equations in two or three variables by choosing the most effective method for the given problem.
g. Solve linear, quadratic, absolute value, and rational inequalities.
h. Solve quadratic equations with real and complex solutions by completing the square and using the quadratic formula.
i. Graph quadratic functions by determining and using the vertex and stretching constant.
j. Add, subtract, multiply, and divide complex numbers.
k. Convert radicals to rational exponents and vice versa.
l. Add, subtract, multiply, divide, or compose two given functions.
m. Find the inverse of a given function.
n. Graph exponential and logarithmic functions using transformations.
o. Solve exponential and logarithmic equations.
p. Simplify expressions using the properties of logarithms.
q. Identify the equations for and sketch the graphs of conic sections.
r. List a requisite number of terms of a given arithmetic, geometric, or recursive sequence.

s. Determine the general term of a given arithmetic or geometric sequence.

t. Determine the sum of a fixed number of terms of an arithmetic or geometric series, and determine the sum of an infinite geometric series when it exists.

u. Solve problems involving permutations, combinations, and probability.

C. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>54.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Lab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

3 Units

D. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Lecture and discussion for presentation of material

2. Demonstrations of mathematical techniques, applications and problem solving strategies by both instructor and students

3. Application of material to specific problems in homework and/or in-class exercises

4. Homework assignments and in-class exercises require students to analyze problems and apply appropriate procedures to solve them.

E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS

   Time spent on coursework in addition to hours of instruction (lecture hours)

   1. Daily homework assignments requiring at least two hours per class hour.

   2. Daily review of class notes and readings from the text.

   3. Review and preparation for examinations, including the final exam.

2. EVIDENCE OF CRITICAL THINKING

   Assignments require the appropriate level of critical thinking

   1. In a survey of 275 community college students 120 were females, 160 were transfer students, and 187 were under 25 years of age. Furthermore, 100 were female transfer students, 120 were transfer students under 25, 77 were females under 25, and 70 were female transfer students who were under 25 years of age. How many students were male transfer students? How many were transfer students who were at least 25 year old? How many were male non-transfer students who are at least 25 years old? How many were females or transfer students?

   2. A stereo system contains 50 transistors. The probability that a given transistor will fail in 100,000 hours of use is 0.0005. Assume the failures of the various transistors are independent of one another. What is the probability that no transistors will fail in the first 100,000 hours of use?

F. TEXTS AND OTHER READINGS (TYPICAL)
III. DESIRED LEARNING

A. COURSE GOAL
   As a result of satisfactory completion of this course, the student should be prepared to:

   Solve applied problems, apply the principles of inductive and deductive logic, and analyze and evaluate mathematical systems.

B. STUDENT LEARNING GOALS
   Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals
   Upon satisfactory completion of this course, the student will be able to:

   a. apply algebraic techniques to solve problems in various mathematical disciplines.
   b. distinguish between inductive and deductive reasoning, describe the effectiveness and limitations of each, and apply each as necessary to the solution of problems.
   c. name famous mathematicians and list some of their important contributions.
   d. describe the development of mathematics from prehistory to the present, including the contributions of various cultures.
   e. for at least four mathematical content areas:
      1. Describe the relationship of the area to mathematics as a whole and to other disciplines as appropriate.
      2. List important problems, techniques, and individuals.
      3. Apply the techniques of the area to solve problems.
      4. Describe applications of the area to problems outside of mathematics.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT
   1. Tests and quizzes given at regular intervals.
   2. Daily homework assignments.
   3. Reports and projects (optional).

B. SUMMATIVE ASSESSMENT
   1. A two to three hour final exam, excluding group and multiple choice.
Proposal Impact

MATH 101 Mathematical Ideas and Applications
**Course Revision Major**
James Johnson

Courses

1. BIO 101 *Pending*
2. BIO 101 *Active*
3. CHEM 101 *Active*

Cross Listed Courses

Programs
MATH 105 - Structure of Mathematics 1  
Action Type: Course Revision Major  
Effective:  
Primary Author: Jaymes Michelena  
Other Author(s):  
CC Representative Approval By:  
CC Staff Review By:  
Division Dean Approval By:  

Rationale for Course Action  

Transfer and GE Status  
CSU Transfer: Requested  
UC Transfer: Requested  
CSU-GE Category: CSU-GE - B4 Requested  

Course Data Elements  
Credit Type: Requested  
Credit Sub-Type: Requested  
TOP Code:  
SAM Code:  
State Classification: A  
Open Entry/Open Exit: No  
Work Experience: No  

Instructor Load  

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-105</td>
<td>Lecture</td>
<td>72.00</td>
<td>26.67%</td>
<td></td>
</tr>
<tr>
<td>MATH-105</td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>MATH-105</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>72</td>
<td>26.67%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees  

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:  
These items have continuing value because:  
If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
Enrollment Restrictions & Advisories

Prerequisite: MATH 90
I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

MATH-105 Structure of Mathematics 1
Prerequisite: Satisfactory completion of MATH 90 or equivalent placement by MJC assessment process.

Structure of arithmetic for prospective elementary school teachers. The definitions, operations, and properties of sets, counting numbers, integers, rational and irrational numbers; numeration systems; number theory, logic. Field trips are not required. Course is applicable to the associate degree. General Education:
CSU-GE - B4

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

   a. Sets
   i. Set operations
   ii. Venn diagrams

   b. Problem Solving
   i. Principles
   ii. Strategies
   iii. Applications

   c. Numeration Systems
   i. Historical Numeration Systems
   ii. Non-decimal Positional Systems

   d. Whole Numbers
   i. Models for Arithmetic Operations
   ii. Algorithms for Arithmetic Operations

   e. Integers
i. Models for Integers
ii. Algorithms for Integers

f. Rational Numbers
i. Models for Rationals
ii. Algorithms for Arithmetic with Rationals

g. Real Number System
i. Introduction to Irrational Numbers
ii. Decimals
iii. Percent

h. Number Theory
i. Divisibility
ii. Clock Arithmetic
iii. Ratio and Proportion
iv. GCD and LCM

i. Methods of Calculations
i. Techniques of Mental Arithmetic
ii. Calculator Related Concerns
iii. Pencil and Paper Techniques

B. ENROLLMENT RESTRICTIONS

1. Prerequisites
Satisfactory completion of MATH 90 or equivalent placement by MJC assessment process.

2. Requisite Skills
Before entering the course, the student will be able to:

a. Graph lines and find the equation of a line, given sufficient information.
b. Effectively use function notation to describe mathematical relationships.
c. Determine the domain and range of a given function.
d. Given a relation between two variables, determine if the relation is a function.
e. Graph linear, quadratic, absolute value, and simple cubic functions using transformations.
f. Solve systems of linear equations in two or three variables by choosing the most effective method for the given problem.

g. Solve linear, quadratic, absolute value, and rational inequalities.

h. Solve quadratic equations with real and complex solutions by completing the square and using the quadratic formula.

i. Graph quadratic functions by determining and using the vertex and stretching constant.

j. Add, subtract, multiply, and divide complex numbers.

k. Convert radicals to rational exponents and vice versa.

l. Add, subtract, multiply, divide, or compose two given functions.

m. Find the inverse of a given function.

n. Graph exponential and logarithmic functions using transformations.

o. Solve exponential and logarithmic equations.

p. Simplify expressions using the properties of logarithms.

q. Identify the equations for and sketch the graphs of conic sections.

r. List a requisite number of terms of a given arithmetic, geometric, or recursive sequence.

s. Determine the general term of a given arithmetic or geometric sequence.

t. Determine the sum of a fixed number of terms of an arithmetic or geometric series, and determine the sum of an infinite geometric series when it exists.

u. Solve problems involving permutations, combinations, and probability.

C. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>72.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Lab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Lecture/discussion

2. Demonstrations of problem solving by instructor and/or students

3. Exercise sets which develop mathematical skills and provide practice in applying those skills

4. (optional) Field trips, projects, and readings from professional journals to inform students of current issues in elementary mathematics education

5. Problem-solving exercises require students to analyze problems and either select appropriate previously learned solution methods or create their own method.

6. Class discussions require students to analyze and compare different teaching strategies and
E. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS

Time spent on coursework in addition to hours of instruction (lecture hours)

Homework assignments should be assigned on a daily or weekly basis. Exercises from the textbook can be used for these assignments, to be supplemented as desired. Each hour of class time should produce almost 2 hours of homework.

Several exams should occur during the semester, apportioned as appropriate. Each exam should require several hours of preparation from the student.

A comprehensive final exam should be held during the scheduled time. This exam should require several hours of preparation from the student.

2. EVIDENCE OF CRITICAL THINKING

Assignments require the appropriate level of critical thinking

a. Use the grid method to illustrate the product of \( \frac{3}{4} \) and \( \frac{1}{2} \).

b. Use Polya’s problem solving principles to solve the following problem. At a benefit concert, 600 tickets were sold and $1500 was raised. If there were $2 and $5 tickets, how many of each type was sold?

c. Use mats, strips, and units to find the sum of 13\text{four} and 12\text{four}.

d. Find the product of 261 and 5,639 using the lattice algorithm.

F. TEXTS AND OTHER READINGS (TYPICAL)


2. Other: Mathematics Framework for California Public Schools, Published 2005, California Department of Education

3. Other: Principles and Standard for School Mathematics, Published 2000, National Council of Teachers of Mathematics

III. DESIRED LEARNING

A. COURSE GOAL

As a result of satisfactory completion of this course, the student should be prepared to:

Explain mathematical concepts to elementary school children. They should also be prepared to succeed in MATH 106.

B. STUDENT LEARNING GOALS

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals

Upon satisfactory completion of this course, the student will be able to:

a. define the vocabulary of the structure of number systems.
b. compare and contrast other numeration systems with the Hindu-Arabic base 10 place value system.

c. outline the relationships of the major subsets of the real number system.

d. name and describe the properties of the real number system.

e. apply the operations of the real number system to selected problems.

f. select appropriate problem solving strategies and use the strategies to solve problems.

g. use various algorithms for calculations and evaluate the effectiveness of each.

h. develop positive attitudes toward mathematics and mathematics teaching.

i. identify resources available to elementary mathematics teachers.

j. use mental arithmetic, paper and pencil calculations, and calculators as appropriate.

k. select appropriate problem solving strategies and use them to solve problems.

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Homework

2. Tests given regularly throughout the semester

3. (Optional) Projects and Reports

B. SUMMATIVE ASSESSMENT

1. Final examination

2. (Optional) Projects and Reports
Technology Mediated Instruction (T.M.I.) Form

PREPARED BY: Jaymes Michelena
DATE SUBMITTED:
COURSE PREFIX AND NUMBER: MATH 105
COURSE TITLE: Structure of Mathematics 1
EFFECTIVE DATE:

METHOD OF INSTRUCTION

MIXED MODALITIES/HYBRID COURSE Some, but not all, class time is replaced by distance education. Students must have regular access to a computer which is connected to the Internet. Course has one or more on-campus meetings.

Lectures will take place in a combination of face-to-face and online modalities. Some will be presented in person while others will be covered online. Discussion and clarification will take place face-to-face, with guided practice online. Approximately 50% of the course will be completed face to face and approximately 50% of the course will be completed online.

TYPE OF TEACHING MODALITIES

<table>
<thead>
<tr>
<th>TEACHING MODALITIES</th>
<th>TEACHING MODALITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Meetings/Review Sessions</td>
<td>Web or Computer-based Activities</td>
</tr>
<tr>
<td>E-mail</td>
<td>Written Assignments</td>
</tr>
<tr>
<td>Asynchronous Discussion</td>
<td>Community Activities</td>
</tr>
<tr>
<td>Viewing Text-based Materials</td>
<td>Reading Online Materials</td>
</tr>
<tr>
<td></td>
<td>Viewing video/audio Materials</td>
</tr>
<tr>
<td></td>
<td>Quizzes, Self-test and Exams</td>
</tr>
</tbody>
</table>

COURSE ANALYSIS

1. Describe this hybrid option. What parts of the course are done face-to-face? What parts are done online? Approximately what percentage of the course is done in each format? Lectures will take place in a combination of face-to-face and online modalities. Some will be presented in person while others will be covered online. Discussion and clarification will take place face-to-face, with guided practice online. Approximately 50% of the course will be completed face to face and approximately 50% of the course will be completed online.

2. Describe how methods selected will insure appropriate instructor/student contact as required by Title 5. There is face-to-face contact with the students to insure appropriate instructor/student contact. In addition, there is online contact using e-mail and software packages which insures appropriate instructor/student contact.

3. Describe how the methods selected will allow students to meet the student learning goals of the course. With the face-to-face and online modalities the students will have a lot of information to help them understand the student learning goals for the course.

4. Are the methods of evaluation different from those listed on the approved course outline? If so, in what ways do they differ? No differences.
<table>
<thead>
<tr>
<th>Expedited Approval Information</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>What effective date are you requesting?</strong></td>
</tr>
<tr>
<td><strong>Why are you requesting expedited approval?</strong></td>
</tr>
<tr>
<td><strong>Provide below your written rationale demonstrating imminent need</strong></td>
</tr>
</tbody>
</table>
Proposal Impact

MATH 105 Structure of Mathematics 1
**Course Revision Major**
Jaymes Michelena

Courses

1. MATH 106 *Active*
2. MATH 106 *Launched*

Cross Listed Courses

Programs
MATH 106 Course Data Summary Report

MATH 106 - Structure of Mathematics 2
Action Type: Course Revision Major
Effective:
Primary Author: Michael Adams
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested
UC Transfer: Requested
CSU-GE Category: CSU-GE - B4 Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: A
Open Entry/Open Exit: No  Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-106</td>
<td>Lecture</td>
<td>72.00</td>
<td>26.67%</td>
<td></td>
</tr>
<tr>
<td>MATH-106</td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>MATH-106</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>72</td>
<td>26.67%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
Enrollment Restrictions & Advisories

Prerequisite: MATH 105
I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

MATH-106 Structure of Mathematics 2
4 Units

Prerequisite: Satisfactory completion of MATH 105.

Elementary probability, statistics and geometry for prospective elementary school teachers. Includes Euclidean geometry, measurement, and analytic geometry. Field trips are not required. Course is applicable to the associate degree. General Education: CSU-GE - B4

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

a. Statistics
   i. Organization and description of data
   ii. Measures of central tendency and dispersion
   iii. Common statistical distributions
   iv. Interpretation of data

b. Probability
   i. Computing probabilities in simple experiments
   ii. Compound experiments and tree diagrams
   iii. Conditional probability
   iv. Odds and expected value
   v. Simulation
   vi. Geometric probability

c. Measurement
   i. The nature of measurement
   ii. Standard vs. nonstandard units
   iii. Length, perimeter, and area
iv. Volume and surface area

d. Geometry
   i. Recognizing and analyzing geometric shapes
   ii. Properties of geometric shapes
   iii. Three-dimensional shapes
   iv. Triangle congruence and similarity
   v. Geometric constructions
   vi. Coordinate geometry
   vii. Geometry using transformations

e. Relations and Functions
   i. Domain and range
   ii. Definition of a function
   iii. Function models

B. ENROLLMENT RESTRICTIONS

1. Prerequisites
   Satisfactory completion of MATH 105.

2. Requisite Skills
   Before entering the course, the student will be able to:
   a. Define the vocabulary of the structure of number systems.
   b. Compare and contrast other numeration systems with the Hindu-Arabic base 10 place value system.
   c. Name and describe the properties of the real number system.
   d. Apply the operations of the real number system to selected problems.
   e. Select appropriate problem solving strategies and use the strategies to solve problems.
   f. Use various algorithms for calculations and evaluate the effectiveness of each.
   g. Develop positive attitudes toward mathematics and mathematics teaching.
   h. Identify resources available to elementary mathematics teachers.
   i. Use mental arithmetic, paper and pencil calculations, and calculators as appropriate.
   j. Select appropriate problem solving strategies and use them to solve problems.
C. **HOURS AND UNITS**

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>72.00</td>
<td>4.00</td>
</tr>
<tr>
<td>Lab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. **METHODS OF INSTRUCTION (TYPICAL)**

*Instructors of the course might conduct the course using the following method:*

1. Lecture/discussion
2. Demonstrations of problem solving by instructor and/or students
3. Exercise sets which develop mathematical skills and provide practice in applying those skills
4. (optional) Field trips, projects, and readings from professional journals to inform students of current issues in elementary mathematics education
5. Problem-solving exercises require students to analyze problems and either select appropriate previously learned solution methods or create their own method
6. Class discussions require students to analyze and compare different teaching strategies and philosophies

E. **ASSIGNMENTS (TYPICAL)**

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   Homework assignments should be assigned on a daily or weekly basis. Exercises from the textbook can be used for these assignments, to be supplemented as desired. Each hour of class time should produce almost 2 hours of homework.

   Several exams should occur during the semester, apportioned as appropriate. Each exam should require several hours of preparation from the student.

   A comprehensive final exam should be held during the scheduled time. This exam should require several hours of preparation from the student.

2. **EVIDENCE OF CRITICAL THINKING**

   *Assignments require the appropriate level of critical thinking*

   Homework is expected to help foster a student's understanding of the material, and give them an understanding of the level of performance that will be expected of them. The textbook itself has many fine examples of such problems.

   Quizzes and exams should challenge a student to perform at a high level. Free-response questions are expected to be the norm, such as the following:

   1. Draw a closed, non-simple, polygonal curve.
   2. Using a compass and straightedge, divide a given line segment into 5 equal pieces.
   3. A club consists of 3 sophomores, 3 juniors, and 4 seniors. There is an election for the offices of president, vice-president, treasurer, and secretary. What is the probability that all 4 officers are seniors?
   4. Find the mean, median, mode, first quartile, and third quartile, for a data set of 29 2-digit numbers.

F. **TEXTS AND OTHER READINGS (TYPICAL)**

Curriculum Committee Agenda Page 279 March 17, 2009

**Division:** Science, Math & Engineering Printed on: 12/03/2009 02:14 PM

2. **Other:** Mathematics Framework for California Public Schools, Published 2005, California Department of Education

3. **Other:** Principles and Standard for School Mathematics, Published 2000, National Council of Teachers of Mathematics

### III. DESIRED LEARNING

#### A. COURSE GOAL

*As a result of satisfactory completion of this course, the student should be prepared to:*

Explain advanced mathematical concepts to Elementary and Junior-High level students, including probability and statistics, geometry, and problem solving.

#### B. STUDENT LEARNING GOALS

*Mastery of the following learning goals will enable the student to achieve the overall course goal.*

1. **Required Learning Goals**

   *Upon satisfactory completion of this course, the student will be able to:*

   a. design and perform statistical experiments.
   b. organize, present, and interpret data in both graphical and numerical form.
   c. calculate and interpret the common statistical measures of central tendency and dispersion.
   d. design and perform probability experiments.
   e. calculate probabilities of simple and multi-stage events.
   f. use probability to design simulations of real life situations, to perform the simulations, and interpret the results.
   g. state the essential characteristics of two- and three-dimensional figures.
   h. calculate area, volume, and surface area of figures, using both standard and nonstandard units.
   i. define similarity and congruence of triangles and apply the definitions to solve problems.
   j. use the principles of transformation geometry to prove facts about geometric objects.
   k. identify, use, and evaluate resources available to elementary mathematics teachers.
   l. select appropriate problem-solving strategies and use the strategies to solve problems.

### IV. METHODS OF ASSESSMENT (TYPICAL)

#### A. FORMATIVE ASSESSMENT

1. Assigned homework
2. Tests given regularly throughout the semester
3. (optional) Projects and reports

B. **SUMMATIVE ASSESSMENT**

1. Tests given regularly throughout the semester
2. Final examination
Proposal Impact

MATH 106 Structure of Mathematics 2
**Course Revision Major**
Michael Adams

Courses

Cross Listed Courses

Programs
MATH 121 - Pre-Calculus 1

Action Type: Periodic Review

Effective:

Primary Author: Hardev Dhillon

Other Author(s):

CC Representative Approval By:

CC Staff Review By:

Division Dean Approval By:

---

Rationale for Course Action

Transfer and GE Status

CSU Transfer: Requested
UC Transfer: Requested
CSU-GE Category: CSU-GE - B4 Requested
IGETC Category: IGETC - 2M Requested

Course Data Elements

Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: 
SAM Code: 
State Classification: A
Open Entry/Open Exit: No
Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>MATH-121</td>
<td>Lecture</td>
<td>90.00</td>
<td>33.33%</td>
<td></td>
</tr>
<tr>
<td>MATH-121</td>
<td>Lab</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>MATH-121</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
<td>90</td>
<td>33.33%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
Enrollment Restrictions & Advisories

Prerequisite: MATH 90
I. **OVERVIEW**
The following information will appear in the 2009 - 2010 catalog

**MATH-121 Pre-Calculus 1**

- **Prerequisite:** Satisfactory completion of MATH 90 or equivalent placement by MJC assessment process.

A one-semester College Algebra course or, together with Math 122, a two-semester Precalculus course sequence. Emphasis on algebra skills essential for success in calculus. Topics include: review of linear, quadratic, rational, radical, exponential, logarithmic equations and graphs; systems of equations and inequalities (linear and nonlinear); functions and graphs; synthetic division; complex roots of polynomials; the Fundamental Theorem of Algebra; applications of exponential and logarithmic equations; sequences and series; mathematical induction; combinatorics. Field trips are not required. Course is applicable to the associate degree. General Education:

- CSU-GE - B4
- IGETC Category: IGETC - 2M

II. **LEARNING CONTEXT**

Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. **COURSE CONTENT**

1. **Required Content:**

   a. Algebra Review
      i. Radicals; Rational Exponents
      ii. Polynomials and Rational Expressions
      iii. Completing the Square; the Quadratic Formula

   b. Equations and Graphs
      i. Topics from Algebra and Geometry
      ii. Solving Equations
      iii. Setting up Equations: Applications
      iv. Inequalities
      v. Rectangular Coordinates; Graphs; Circles
      vi. Lines
      vii. Linear Curve Fitting
c. Functions and Their Graphs
   i. Functions
   ii. Graphing Techniques: Transformations
   iii. Operations on Functions; Composite Functions
   iv. Mathematical Models: Constructing Functions

d. Polynomial and Rational Functions
   i. Quadratic Functions; Curve Fitting
   ii. Polynomial Functions
   iii. Rational Functions
   iv. Synthetic Division
   v. The Real Zeros of a Polynomial Function
   vi. Complex Numbers; Quadratic Equations with a Negative Discriminant
   vii. Complex Zeros; Fundamental Theorem of Algebra

e. Exponential and Logarithmic Functions
   i. One-to-One Functions; Inverse Functions
   ii. Exponential Functions
   iii. Logarithmic Functions
   iv. Properties of Logarithms; Curve Fitting
   v. Logarithmic and Exponential Equations
   vi. Compound Interest
   vii. Growth and Decay
   viii. Logarithmic Scales

f. Systems of Equations and Inequalities
   i. Systems of Linear Equations: Substitution and Elimination
   ii. Systems of Linear Equations: Matrices
   iii. Systems of Linear Equations: Determinants
   iv. Matrix Algebra
   v. Systems of Nonlinear Equations
   vi. Systems of Inequalities
g. Sequences; Induction; Counting
   i. Sequences
   ii. Arithmetic Sequences
   iii. Geometric Sequences; Geometric Series
   iv. Mathematical Induction
   v. The Binomial Theorem
   vi. Sets and Counting
   vii. Permutations and Combinations

2. **Recommended Content:**
   
a. Probability

B. **ENROLLMENT RESTRICTIONS**

1. **Prerequisites**
   
   Satisfactory completion of MATH 90 or equivalent placement by MJC assessment process.

2. **Requisite Skills**

   *Before entering the course, the student will be able to:*
   
   a. Graph lines and find the equation of a line, given sufficient information.
   
   b. Determine the domain and range of a given function.
   
   c. Given a relation between two variables, determine if the relation is a function.
   
   d. Add, subtract, multiply, divide, or compose two given functions.
   
   e. Find the inverse of a given function.
   
   f. Graph linear, quadratic, absolute value, and simple cubic functions using transformations.
   
   g. Graph quadratic functions by determining and using the vertex and stretching constant.
   
   h. Solve systems of linear equations in two or three variables by choosing the most effective method for the given problem.
   
   i. Solve linear, quadratic, absolute value, and rational inequalities.
   
   j. Solve quadratic equations with real and complex solutions by completing the square and using the quadratic formula.
   
   k. Graph exponential and logarithmic functions using transformations.
   
   l. Solve exponential and logarithmic equations.
m. Simplify expressions using the properties of logarithms.

n. Identify the equations for and sketch the graphs of conic sections.

o. List a requisite number of terms of a given arithmetic, geometric, or recursive sequence.

p. Determine the general term of a given arithmetic or geometric sequence.

q. Determine the sum of a fixed number of terms of an arithmetic or geometric series, and determine the sum of an infinite geometric series when it exists.

r. Solve problems involving permutations, combinations, and probability.

s. Add, subtract, multiply, and divide complex numbers.

C. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>90.00</td>
<td>5.00</td>
</tr>
<tr>
<td>Lab</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

D. METHODS OF INSTRUCTION (TYPICAL)

Instructors of the course might conduct the course using the following method:

1. Lecture
2. Discussion
3. Demonstration of mathematical techniques
4. Guided practice
5. Homework assignments

E. ASSIGNMENTS (TYPICAL)

1. **EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS**

   *Time spent on coursework in addition to hours of instruction (lecture hours)*

   a. Daily homework assignments requiring approximately two hours per class hour
   b. Ongoing review of flashcards or study sheet
   c. Preparation for examinations, several times during the term
   d. Preparation for final exam

2. **EVIDENCE OF CRITICAL THINKING**

   *Assignments require the appropriate level of critical thinking*

   a. Given a fourth degree polynomial with integer coefficients, use the Rational Roots Theorem, the Fundamental Theorem of Algebra, and synthetic division to find the complete factorization of the polynomial over the complex number system.
   b. Graph a given rational function, citing details including the domain of the function, the equations
of its vertical and/or horizontal asymptotes, coordinates of all intercepts, and intervals on which
the function is increasing and decreasing.

F. TEXTS AND OTHER READINGS (TYPICAL)


III. DESIRED LEARNING

A. COURSE GOAL

As a result of satisfactory completion of this course, the student should be prepared to:

Effectively manipulate algebraic expressions and solve various types of equations as will be encountered
in a first-semester calculus course. By significantly strengthening their algebra skills, students successfully
completing this course will be far better prepared for the rigors and mechanics of calculus.

B. STUDENT LEARNING GOALS

Mastery of the following learning goals will enable the student to achieve the overall course goal.

1. Required Learning Goals

Upon satisfactory completion of this course, the student will be able to:

a. exhibit the connection between radicals and rational exponents.
b. add, subtract, multiply, and divide polynomial and rational expressions.
c. solve quadratic equations by factoring, completing the square, or using the quadratic formula.
d. solve linear, quadratic, absolute value, and rational equations and inequalities.
e. solve applied problems of the above types.
f. graph functions via tables of values, transformations, and coordinate-wise operations.
g. add, subtract, multiply, divide, and compose functions.
h. calculate the two forms of the difference quotient for a given function.
i. construct functions to model given problems.
j. graph quadratic, polynomial, and rational functions.
k. find all roots (real and complex) of a polynomial by using synthetic division.
l. state and effectively use the Fundamental Theorem of Algebra.
m. find the inverse of a given one-to-one function.
n. graph exponential and logarithmic functions.
o. apply the properties of logarithms to various problems.
p. solve exponential and logarithmic equations.
q. solve problems involving compound interest, exponential growth and decay, Newton's Law of
Cooling, and logarithmic scales.
r. classify sequences as arithmetic, geometric or neither.
s. calculate general terms and finite sums for arithmetic and geometric sequences and series, and, when possible, calculate the sum of an infinite geometric series.

t. prove theorems using the Principle of Mathematical Induction.

u. solve probability problems using the Fundamental Principle of Counting, permutations, and combinations.

v. solve systems of equations and inequalities (linear and nonlinear)

IV. METHODS OF ASSESSMENT (TYPICAL)

A. FORMATIVE ASSESSMENT

1. Midterm exams (excluding the following formats: multiple choice, open book, take home)

2. Quizzes

3. Homework assignments

4. Participation

B. SUMMATIVE ASSESSMENT

1. Comprehensive 2 to 3 hour Final Exam (excluding the following formats: multiple choice, open book, take home)
Technology Mediated Instruction (T.M.I.) Form

PREPARED BY: Hardev Dhillon
COURSE PREFIX AND NUMBER: MATH 121
COURSE TITLE: Pre-Calculus 1
EFFECTIVE DATE:

METHOD OF INSTRUCTION

MIXED MODALITIES/HYBRID COURSE Some, but not all, class time is replaced by distance education. Students must have regular access to a computer which is connected to the Internet. Course has one or more on-campus meetings.

A portion of the class is completed on campus and the other portion is completed online. The on campus component may include: traditional lectures, quizzes, exams, and the final exam. The online component may include the following: watching videos on particular topics, reading the textbook, completing tutorials, completing homework, and taking exams and quizzes. The exact percentage of the course in each format may be decided by the instructor.

TYPE OF TEACHING MODALITIES

<table>
<thead>
<tr>
<th>TEACHING MODALITIES</th>
<th>TEACHING MODALITIES</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group Meetings/Review Sessions</td>
<td>Web or Computer-based Activities</td>
</tr>
<tr>
<td>Telephone Contact</td>
<td>Written Assignments</td>
</tr>
<tr>
<td>E-mail</td>
<td>Viewing video/audio Materials</td>
</tr>
<tr>
<td>Asynchronous Discussion</td>
<td>Quizzes, Self-test and Exams</td>
</tr>
<tr>
<td>Viewing Text-based Materials</td>
<td></td>
</tr>
</tbody>
</table>

COURSE ANALYSIS

1. Describe this hybrid option. What parts of the course are done face-to-face? What parts are done online? Approximately what percentage of the course is done in each format? A portion of the class is completed on campus and the other portion is completed online. The on campus component may include: traditional lectures, quizzes, exams, and the final exam. The online component may include the following: watching videos on particular topics, reading the textbook, completing tutorials, completing homework, and taking exams and quizzes. The exact percentage of the course in each format may be decided by the instructor.

2. Describe how methods selected will insure appropriate instructor/student contact as required by Title 5. Appropriate instructor/student contact is insured by having different means of contact which can be group meetings, telephone contact, e-mail, and/or asynchronous discussion. There is communication with the students on a regular basis.

3. Describe how the methods selected will allow students to meet the student learning goals of the course. In a hybrid class, there are videos available to the students online at any time for every section of the textbook. These videos are very similar to a typical lecture for a topic in Precalculus. Each video explains in detail the entire section and an instructor works out in detail several examples based on the particular topic. There are practice tutorials available for each section of the textbook in which the student is led step by step in solving the problem. For each homework exercise, there are several levels of help available to the student. The student can select Help in which the student is led step by step in solving the problem and then the student receives a similar problem to complete for credit for homework. The student can select to view an example in which the student is shown a similar problem that is solved for the individual step by step. There is a link to the textbook which leads to the animated online version of the textbook and the link leads to the exact section the problem is from. There is a link to the video as an option for help which leads to only that part of the video which is similar to the problem the student is completing. In addition, each problem has a link for the student to e-mail the instructor for help on the particular problem.
4. Are the methods of evaluation different from those listed on the approved course outline? If so, in what ways do they differ? The methods of evaluation are consistent with those listed on the approved course outline.
### Expedited Approval Information

| What effective date are you requesting? | 2009 Semester: Fall |
| Why are you requesting expedited approval? | To avoid loss of course articulation |
| Provide below your written rationale demonstrating imminent need | This course will be offered in the hybrid format during the Fall semester. |
Proposal Impact

MATH 121 Pre-Calculus 1
**Periodic Review**
Hardev Dhillon

Courses

1. MATH 122 *Launched*
2. MATH 122 *Active*
3. MATH 171 *Active*
4. MATH 171 *Pending*

Cross Listed Courses

Programs

1. Engineering Technology A.S. Degree *New Program*
NR 200 - Soils
Action Type: Course Revision Major
Effective:
Primary Author: Dale Pollard
Other Author(s):
CC Representative Approval By:
CC Staff Review By:
Division Dean Approval By:

Rationale for Course Action

Transfer and GE Status
CSU Transfer: Requested
UC Transfer: Requested
CSU-GE Category: CSU-GE - B1, B3 Requested
IGETC Category: IGETC - 5A Requested

Course Data Elements
Credit Type: Requested
Credit Sub-Type: Requested
TOP Code: SAM Code: State Classification: I
Open Entry/Open Exit: No Work Experience: No

Instructor Load

<table>
<thead>
<tr>
<th>Course</th>
<th>Type of Hours</th>
<th>Number of Hours</th>
<th>Faculty Load</th>
<th>Override Load</th>
</tr>
</thead>
<tbody>
<tr>
<td>NR-200</td>
<td>Lecture</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>NR-200</td>
<td>Lab</td>
<td>54.00</td>
<td>15%</td>
<td></td>
</tr>
<tr>
<td>NR-200</td>
<td>Disc</td>
<td>0</td>
<td>0%</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>108</td>
<td>30%</td>
<td></td>
</tr>
</tbody>
</table>

Material Fees

<table>
<thead>
<tr>
<th>Item Name</th>
<th>Quantity</th>
<th>Cost</th>
</tr>
</thead>
</table>

These materials are related to the Student Learning Goals for the course because:

These items have continuing value because:

If the district is NOT the only source of these materials, explain why the students have to pay a fee to the district rather than supply the materials themselves. (Cost savings? Health/Safety? Consistency/Uniformity?)
Modesto Junior College
Course Outline of Record
NR 200

I. OVERVIEW
The following information will appear in the 2009 - 2010 catalog

NR 200  Soils  4 Units

Study of soil derivation, classification and characteristics as related to natural and human systems. Soil as a natural system including chemistry, ecology and geology. Soil use and management including erosion, moisture retention, structure, cultivation and organic matter. Special emphasis placed on the relationship between natural and agronomic soil systems. Laboratory topics include soil type, classification, soil chemistry, water and nutrient management and soil microbiology. Field trips are required. Course is applicable to the associate degree. General Education:
CSU-GE - B1, B3
IGETC Category: IGETC - 5A

II. LEARNING CONTEXT
Given the following learning context, the student who satisfactorily completes this course should be able to achieve the goals specified in Section III, Desired Learning:

A. COURSE CONTENT

1. Required Content:

   A. The soil around us
      1. The function of soils in our ecosystem
      2. Early agrarian societies and their soil management practices, including significant historical events
      3. The soil as an environmental interface
      4. The scientific aspects of soil science, applied research present and future

   B. Formation of soils from parent materials
      1. Weathering of rocks and minerals
      2. Factors influence soil formation
      3. Soil formation in action

   C. Soil classification
      1. Soil orders
      2. Categories and nomenclature of soil taxonomy
      3. Soil series and textural classes
      4. Storie index and land capability classes

   D. Soil physical properties
      1. Texture
      2. Structure
      3. Color
      4. pH
      5. Profile
      6. Bulk density
      7. Particle density
      8. Pore space
      9. Soil management as applied to physical properties

   E. Interpretation and use of soil maps
      1. Remote sensing tools for soil investigations
      2. Satellite imagery
      3. County soil survey reports and their utilization
      4. Geographic Information Systems (GIS) as applied to soils and soil mapping

   F. Organic material and microbiology of soils
      1. Influence of organic material in the soil complex
      2. Composting
3. Diversity of soil organisms
4. Influence of soil microorganisms
5. The soil environment and organisms and organic matter
6. Soil nutrient cycles
7. Concept of a sustainable soil system; the soil food web

G. Soil and the hydrologic cycle
   1. The hydrological cycle
   2. The soil plant atmosphere continuum
   3. Relation to texture, structure, and organic material in the soil
   4. Water retention and movement in the soil
   5. Soil drainage
   6. Precipitation and irrigation water
   7. Water quality influence and assessment
   8. Water conservation applications
   9. Local and regional water issues

H. Soil colloids
   1. Properties and type of colloids
   2. Genesis of soil colloids
   3. Cation exchange capacity
   4. Factors influencing the availability of micronutrient cations and anions
   5. Soil analysis

I. Soil pH
   1. Assessment
   2. Management of acidic soils
   3. Management and reclamation of saline-alkaline soils

J. Global soil quality as affected by human activities

2. Required Lab Content:

A. Formation of soils from parent materials
   1. Weathering of rocks and minerals
   2. Factors influence soil formation
   3. Soil formation in action

B. Soil classification
   1. Soil orders
   2. Categories and nomenclature of soil taxonomy
   3. Soil series and textural classes
   4. Storrie index and land capability classes

C. Soil physical properties
   1. Texture
   2. Structure
   3. Color
   4. pH
   5. Profile
   6. Bulk density
   7. Particle density
   8. Pore space
   9. Soil management as applied to physical properties

D. Interpretation and use of soil maps
   1. Remote sensing tools for soil investigations
   2. Satellite imagery
   3. County soil survey reports and their utilization
   4. Geographic Information Systems (GIS) as applied to soils

E. Organic material and microbiology of soils
   1. Influence of organic material in the soil complex
   2. Composting
   3. Diversity of soil organisms
   4. Influence of soil microorganisms
   5. The soil environment and organisms and organic matter
   6. Soil nutrient cycles
   7. Concept of a sustainable soil system; the soil food web

F. Soil and the hydrologic cycle
   1. Relation to texture, structure, and organic material in the
soil
2. Water retention and movement in the soil
3. Soil drainage
4. Precipitation and irrigation water
5. Water conservation applications
6. Local and regional water issues

G. Soil analysis
H. Soil pH
1. Assessment
2. Management of acidic soils
3. Management and reclamation of saline-alkaline soils

B. HOURS AND UNITS

<table>
<thead>
<tr>
<th>INST METHOD</th>
<th>TERM HOURS</th>
<th>UNITS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lect</td>
<td>54.00</td>
<td>3.00</td>
</tr>
<tr>
<td>Lab</td>
<td>54.00</td>
<td>1.00</td>
</tr>
<tr>
<td>Disc</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

C. METHODS OF INSTRUCTION (TYPICAL)
Instructors of the course might conduct the course using the following method:

1. Lecture, discussion, reading and writing, and lab experiments.
2. Videos and power point presentations to supplement lecture.
3. “Hands-on” analytical field trips.
4. Hypothesizing and applying other aspects of scientific method in problem solving.
5. Writing assignments emphasizing descriptive, analytical, and evaluative skills.
7. Comparing and interpreting individual and group results.

D. ASSIGNMENTS (TYPICAL)

1. EVIDENCE OF APPROPRIATE WORKLOAD FOR COURSE UNITS
   Time spent on coursework in addition to hours of instruction (lecture hours)
   a. Daily reading of texts
   b. Preparation for daily quizzes
   c. Internet research
   d. Weekly laboratory reports

2. EVIDENCE OF CRITICAL THINKING
   Assignments require the appropriate level of critical thinking
   a. Typical exam question: Discuss the story index and evaluate the rating system used to determine the value of land, and the types of crop that can be grown on that soil.
   b. Describe the twelve soil classification systems.
E. **TEXTS AND OTHER READINGS (TYPICAL)**


2. **Other:** Readings from soil industry magazines, journals, articles: Storie Index, Soil Quality Manual, and soil science news articles.

III. **DESIRED LEARNING**

A. **COURSE GOAL**

*As a result of satisfactory completion of this course, the student should be prepared to:*

Evaluate the quality of the soil based on soil profile, texture, pH, structure, nutrient availability and determine the best use of the site.

B. **STUDENT LEARNING GOALS**

*Mastery of the following learning goals will enable the student to achieve the overall course goal.*

1. **Required Learning Goals**

*Upon satisfactory completion of this course, the student will be able to:*

   a. Analyze local soil quality as affected by human and natural activities.

   b. Explain local geographical features and their relationship to local soils.

   c. Evaluate parent rocks and other soil forming processes influence on local and global soils.

   d. Demonstrate the determination of the following soil physical properties: textures (two methods), use of texture triangle, bulk density, particle density, pore space, organic content, color pH, structure, conductivity and reactivity.

   e. Demonstrate an understanding of the classification of local and global soil orders (i.e., soil taxonomy).

   f. Analyze water and nutrient management in soils.

   g. Apply soil nutrient cycles to soil, plant, and soil organism relationships.

   h. Demonstrate an ability to use appropriate terminology when discussing soils.

   i. Demonstrate practical soil management including soil conversion and sustainability.

   j. Analyze a soil’s microbiological activity level.

   k. Demonstrate an understanding of a soil food web.

   l. Describe the features of a soil profile and relate such to soil management practices.

   m. Demonstrate how to read a soil map, explain the importance of soil mapping and how to locate a specific site using both township/range and GIS (Geographic Information Systems).

   n. Demonstrate how to determine a Soil Storie Index Rating and a Natural Resources Conservation Service land capability class.

   o. Describe the organic breakdown cycle of a soil and the role of organisms in soil physical and chemical properties.
p. Evaluate a soil’s water holding capacity, plant available water, properties and movement of water in soil.

q. Assess and evaluate the anion and cation exchange capacity for a given soil.

r. Interpret a soil nutrient analysis including percent base saturation.

s. Demonstrate the use of the scientific method when validating and/or experimenting on the principles of soil science.

t. Demonstrate the determination of the following soil physical properties: textures (two methods), use of texture triangle, bulk density, particle density, pore space, organic content, color pH, structure, conductivity and reactivity.

u. Describe the features of a soil profile and relate such to soil management practices.

2. **Lab Learning Goals**

   *Upon satisfactory completion of the lab portion of this course, the student will be able to:*

   a. Evaluate parent rocks and other soil forming processes influence on local and global soils.

   b. Demonstrate the determination of the following soil physical properties: textures (two methods), use of texture triangle, bulk density, particle density, pore space, organic content, color pH, structure, conductivity and reactivity.

   c. Demonstrate practical soil management including soil conversion and sustainability.

   d. Demonstrate how to determine a Soil Storrie Index Rating and a Natural Resources Conservation Service land capability class.

   e. Demonstrate how to read a soil map, explain the importance of soil mapping and how to locate a specific site using both township/range and GIS (Geographic Information Systems).

   f. Assess and evaluate the anion and cation exchange capacity for a given soil.

   g. Describe the features of a soil profile and relate such to soil management practices.

### IV. METHODS OF ASSESSMENT (TYPICAL)

**A. FORMATIVE ASSESSMENT**

1. Supplementary activities
   1. Participation in classroom/laboratory simulations that demonstrate soil science principles.
   2. County Soil Survey book research on topics relating to soil science.

2. In class objective examinations that test for definitions and major soil science concepts.

3. Out of class assignments that test for the understanding of major concepts including:
   1. Extensive laboratory write-ups.
   2. Detailed soil analysis reports.
   3. Evaluation of participation in field trips.

**B. SUMMATIVE ASSESSMENT**

1. Students will organize their laboratory experiences in a completed resource notebook format.

2. A comprehensive laboratory examination and demonstration of skills associated with soil analysis.
3. Final comprehensive examination.
Proposal Impact

NR 200 Soils
**Course Revision Major**
Dale Pollard

Courses

1. PLSC 241 *Active*
2. PLSC 250 *Active*

Cross Listed Courses

Programs

1. Agricultural Science A.S. Degree *New Program*
2. Agriculture Business A.S. Degree *New Program*
3. Agriculture Laboratory Technician Certificate of Achievement *New Program*
4. Agriculture Laboratory Technician A.S. Degree *New Program*
5. Agriculture: Sales, Service A.S. Degree *New Program*
6. Agriculture: Sales, Service Technician Certificate of Achievement *New Program*
7. Animal Science A.S. Degree *New Program*
8. Commercial Floristry Technician Certificate of Achievement *New Program*
9. Crop Science A.S. Degree *New Program*
10. Dairy Industry A.S. Degree *New Program*
11. Dairy Science A.S. Degree *New Program*
12. Environmental Horticultural Science A.S. Degree *New Program*
13. Food Processing Certificate of Achievement *New Program*
14. Food Processing A.S. Degree *New Program*
15. Forestry Certificate of Achievement *New Program*
16. Forestry A.S. Degree *New Program*
17. Forestry A.S. Degree *New Program*
18. Forestry Certificate of Achievement *New Program*
19. Fruit Science A.S. Degree *New Program*
20. Fruit Science A.S. Degree *New Program*
21. Landscape Architecture A.S. Degree *New Program*
22. Landscape Design Certificate of Achievement *New Program*
23. Landscape and Park Maintenance Certificate of Achievement *New Program*
24. Landscape and Park Maintenance Certificate of Achievement *New Program*
25. Mechanized Agriculture A.S. Degree *New Program*
26. Nursery Production Certificate of Achievement *New Program*
27. Poultry Science A.S. Degree *New Program*
28. Recreational Land Management Certificate of Achievement *New Program*
29. Recreational Land Management A.S. Degree *New Program*
30. Soil Science A.S. Degree *New Program*
CURRENTLY APPROVED PROGRAM AS LISTED IN 2008-2009 MJC CATALOG

The Auto Body program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Complete and current practices used in industry are emphasized. The orientation is toward theory and hands-on activities required to perform practical repair operations. Related trade and technical information, care and use of equipment and shop safety are also a focus in the Auto Body program.

REQUIRED COMPETENCIES

MATH 20 [1,2,3] Pre - Algebra 4 OR Eligibility for MATH 70 through Placement Exam

REQUIRED COURSES - COMPLETE 23 UNITS

AUBDY 115 [1] Introduction to Technical Industries 1
AUBDY 301 [2] Automotive Collision Repair 1 5
AUBDY 303 [2] Automotive Collision Repair 3 4
AUBDY 304 [3] Automotive Collision Repair 4 4
AUBDY 399 [3] Independent Studies 4

Total Units Required for Degree 23

PROPOSED PROGRAM REVISION

The Auto Body program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Current practices used in industry are emphasized. The course orientation examines use of trade equipment, shop safety, theory and hands-on activities required to perform practical repair operations.

REQUIRED COMPETENCIES

MATH 20 [1,2,3] Pre - Algebra 4 OR Eligibility for MATH 70 through Placement Exam

REQUIRED COURSES - COMPLETE 30 UNITS

AUBDY 115 [1] Introduction to Technical Industries 1
AUTEC 311 [1] Basic Automotive Systems 4
AUBDY 301 [2] Automotive Collision Repair 1 5
AUBDY 303 [2] Automotive Collision Repair 3 4

Total Units Required for Degree 24
TO: Curriculum Committee  
RE: A.A. Degree Auto Body Collision/Repair

CURRENTLY APPROVED PROGRAM AS LISTED IN 2008-2009 MJC CATALOG

The Auto Body program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Complete and current practices used in industry are emphasized. The orientation is toward theory and hands-on activities required to perform practical repair operations. Related trade and technical information, care and use of equipment and shop safety are also a focus in the Auto Body program.

A.A. Degree: Auto Body Collision/Repair  
To earn an Associate in Science Degree, the student must complete the MJC Associate Degree Requirements in addition to completing the coursework below:

REQUIRED COURSES - COMPLETE 20 UNITS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY</td>
<td>Introduction to Technical Industries</td>
<td>1</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Collision Repair 1</td>
<td>5</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Collision Repair 2</td>
<td>5</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Collision Repair 3</td>
<td>4</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Collision Repair 4</td>
<td>4</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Independent Studies</td>
<td>1</td>
</tr>
</tbody>
</table>

Total Units Required for Degree 20

PROPOSED PROGRAM REVISION

A.A. Degree: Auto Body Collision/Repair  
To earn an Associate in Science Degree, the student must complete the MJC Associate Degree Requirements in addition to completing the coursework below:

The Auto Body program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Current practices used in industry are emphasized. The course orientation examines use of trade equipment, shop safety, theory and hands-on activities required to perform practical repair operations.

REQUIRED COURSES - COMPLETE 24 UNITS

<table>
<thead>
<tr>
<th>Code</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY</td>
<td>Introduction to Technical Industries</td>
<td>1</td>
</tr>
<tr>
<td>AUTEC</td>
<td>Basic Automotive Systems</td>
<td>4</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Collision Repair 1</td>
<td>5</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Collision Repair 2</td>
<td>5</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Collision Repair 3</td>
<td>4</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Spray Refinishing 1</td>
<td>2</td>
</tr>
<tr>
<td>AUBDY</td>
<td>Automotive Spray Refinishing 2</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Units Required for Degree 24
CURRENTLY APPROVED PROGRAM AS LISTED IN 2008-2009 MJC CATALOG

The Auto Body program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Complete and current practices used in industry are emphasized. The orientation is toward theory and hands-on activities required to perform practical repair operations. Related trade and technical information, care and use of equipment and shop safety are also a focus in the Auto Body program.

A.S. Degree Auto Body/Refinishing

To earn an Associate in Science Degree, the student must complete the MJC Associate Degree Requirements in addition to completing the coursework below:

REQUIRED COURSES - COMPLETE 31 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY 115</td>
<td>1</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUBDY 301</td>
<td>5</td>
<td>Automotive Collision Repair 1</td>
</tr>
<tr>
<td>AUBDY 302</td>
<td>5</td>
<td>Automotive Collision Repair 2</td>
</tr>
<tr>
<td>AUBDY 303</td>
<td>4</td>
<td>Automotive Collision Repair 3</td>
</tr>
<tr>
<td>AUBDY 304</td>
<td>4</td>
<td>Automotive Collision Repair 4</td>
</tr>
<tr>
<td>AUBDY 399</td>
<td>1</td>
<td>Independent Studies</td>
</tr>
<tr>
<td>AUBDY 321</td>
<td>2</td>
<td>Automotive Spray Refinishing 1</td>
</tr>
<tr>
<td>AUBDY 322</td>
<td>3</td>
<td>Automotive Spray Refinishing 2</td>
</tr>
<tr>
<td>AUTEC 321</td>
<td>3</td>
<td>A5: Braking Systems</td>
</tr>
<tr>
<td>AUTEC 322</td>
<td>3</td>
<td>Steering, Suspension and Alignment</td>
</tr>
</tbody>
</table>

Total Units Required for Degree 31

PROPOSED PROGRAM REVISION

A.S. Degree Auto Body/Refinishing

To earn an Associate in Science Degree, the student must complete the MJC Associate Degree Requirements in addition to completing the coursework below:

The Auto Body program is designed to help the beginning student progress through basic procedures in body repairs and painting to entry-level job skill development. Current practices used in industry are emphasized. The course orientation examines use of trade equipment, shop safety, theory and hands-on activities required to perform practical repair operations.

REQUIRED COURSES - COMPLETE 27.5 UNITS

<table>
<thead>
<tr>
<th>Course</th>
<th>Units</th>
<th>Title</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUBDY 115</td>
<td>1</td>
<td>Introduction to Technical Industries</td>
</tr>
<tr>
<td>AUTEC 311</td>
<td>4</td>
<td>Basic Automotive Systems</td>
</tr>
<tr>
<td>AUBDY 301</td>
<td>5</td>
<td>Automotive Collision Repair 1</td>
</tr>
<tr>
<td>AUBDY 302</td>
<td>5</td>
<td>Automotive Collision Repair 2</td>
</tr>
<tr>
<td>AUBDY 303</td>
<td>4</td>
<td>Automotive Collision Repair 3</td>
</tr>
<tr>
<td>AUBDY 321</td>
<td>2</td>
<td>Automotive Spray Refinishing 1</td>
</tr>
<tr>
<td>AUBDY 322</td>
<td>3</td>
<td>Automotive Spray Refinishing 2</td>
</tr>
<tr>
<td>AUTEC 321</td>
<td>3.5</td>
<td>A5: Braking Systems</td>
</tr>
<tr>
<td>AUTEC 322</td>
<td>3.5</td>
<td>Steering, Suspension and Alignment</td>
</tr>
<tr>
<td>AUTEC 321</td>
<td>3.5</td>
<td>A5: Braking Systems</td>
</tr>
<tr>
<td>AUTEC 368</td>
<td>3.5</td>
<td>A6: Automotive Electricity I</td>
</tr>
</tbody>
</table>

Total Units Required for Degree 31
Hello Sean,

The attached documents are for the March 17, 2009 curriculum agenda. The documents consist of a memo for the committee and the 5 occupational documents required to be completed for submission to the state. It represents about 25% of all the documentation need in the CCCCO and Department of Industrial Relations submittal process. I believe this will provide a summary of the work the Stanislaus County Joint Manufacturing and Maintenance Apprenticeship Committee has been working on since 2007 via monthly meetings. The effort is an exciting opportunity for MJC to continue to place existing college courses as a menu courses that will be part of formal employee training programs for new employee hire by local employers.

PS: Not a whole lot new from the recent handbook work. The Apprenticeship Section revision is still under development. The section below is out of what was recently emailed out by Stephanie Low.

Program and Course Approval Handbook, 3rd Edition
Module 1: Introduction
March 2009 Page 13

**Apprenticeships (credit and noncredit)**

An apprenticeship is defined as preparation for any profession, trade or craft that can be learned through a combination of supervised, on-the-job training and with off-the-job formal education. The California Division of Apprenticeship Standards (DAS), within the California Department of Industrial Relations, and the Chancellor of the California Community Colleges share responsibility for the approval of credit and noncredit Apprenticeship programs.

Program and Course Approval Handbook, 3rd Edition
Module 1: Introduction
March 2009 Page 14

The DAS approves matters dealing with on-the-job instruction and maintains the standards. Both the California Apprenticeship Law and the annual California Budget Act refer to the off-the-job formal education as *related and supplemental instruction* (RSI). Providing RSI is the job of the community colleges, adult schools, and regional occupational program centers. In addition, §3074 of the Labor Code states that Apprenticeship RSI shall be the responsibility of, and be provided by state and local boards in charge of career technical education in partnership with the program sponsor, who is normally the employer. The program or courses must have the
approval of the Chancellor’s Office for both curriculum and RSI funding. The application must contain documentation that the apprenticeship has been approved by DAS. This documentation must list the specific campus approved for the RSI, and must be signed by the Chief of the DAS or his or her designee.

This shared responsibility has created a partnership for developing apprenticeship programs that includes the: community college, employer (also known as the program sponsor) and the California Community Colleges Chancellor’s Office has delegated authority to the:

- Apprenticeship Program Coordinator who provides support to the college and the program sponsor throughout the development and implementation of the apprenticeship program.
- Vice Chancellor of Academic Affairs, who approves the programs and courses offered by the community college, utilizing criteria that represent the standards of good practice established in the field of curriculum design (as described on p. 2).

The college and sponsor must also seek approval from the Division of Apprenticeship Standards (DAS), so that agency participates in consultation with the partners. The procedures for approval of Apprenticeships (credit and noncredit) are described in the Apprenticeship Approval Handbook (under development) and will be available on the Chancellor’s Office web site.

Pedro Mendez  
Director of Technical Education  
Modesto Junior College  
435 College Avenue  
Modesto, CA 95350  
office: (209)575-6355  
Fax: (209)575-6922  
http://www.gomjc.edu/teched
To: Curriculum Committee Members  
From: Pedro Mendez, Director of Technical Education  
Date: March 17, 2009  
RE: Approval for State Submission of Apprenticeship Program

Request: Approval of program so that state application maybe submitted. Apprenticeship Curriculum and Program must be approved by the community college process prior to the Department of Apprenticeship Standards submitting application for approval from the Department of Industrial Relations (Presentation to the Curriculum Committee on effort made in November 2007).

History of Apprenticeship Program Effort at MJC.
Local employers including Del Monte Foods, Morning Star, Fastenal, Modesto Machining have come together to establish the Stanislaus County Area Manufacturing/Maintenance Joint Apprenticeship Committee. This group has been meeting monthly since 2007. The group’s goal to establish 5 structured apprenticeship programs that can assist with the hiring and preparation of new technicians. This consortium of employers are interested in hiring employees as apprentices where a commitment to education is made over a three year period via college courses and plan for in company on-the-job training activity.

Committee Composition:
- Voting Members: local manufacturing employers and
- Advisors: MJC Technical Education, MJC Early College Programs, the Yosemite Regional Occupational Programs, and the Stanislaus County Alliance (local Workforce Investment Board), and the Department of Apprenticeship Standards

Specifically the committee is developing apprenticeships for the following occupational areas:
- Electrician-Maintenance DOT Code:829.261-018
- Instrument Technician DOT Code: 003.261-010
- Machinist DOT Code: 600.280-022
- Maintenance Mechanic DOT Code 638.281-014
- Packaging Technician DOT Code 638.281-01X

Uniqueness of Request Apprenticeship Program
- Joint Committee is interested in building apprenticeship program from existing menu of MJC college credit courses to address need.
- Consortium Structure enables open process for employers to join in

Where are we at?
- Joint Committee has completed the Department of Industrial Relations application that provides employer commitments.
- Handbook documents have been completed
- Identified out of compliance courses that make up program have been submitted for approval
Apprenticeships [RELEVANT INFORMATION FROM PROGRAM AND CURRICULUM HANDBOOK]

A separate form is provided in this handbook for approval of all apprenticeship programs, credit or noncredit. Apprenticeship credit and noncredit offerings have some unique elements regarding curriculum approval and funding approval. All apprenticeship credit programs and noncredit courses must obtain Chancellor’s Office approval for each college responsible for the offerings. This is specifically required by the annual Budget Act.

The apprenticeship curriculum offered by community colleges, adult schools, and regional occupational program centers is referred to as related and supplemental instruction (RSI) in the apprenticeship law and in the Budget Act. In apprenticeship circles one sometimes hears reference to “Montoya Funding” when talking about related and supplemental instruction, but in the law there is no mention of the term “Montoya Funding.” Apprenticeship RSI can be described as follows:

The Apprenticeship related and supplemental instruction (RSI) supplements the on the job training with classroom and laboratory instruction which is intended to provide the apprentice with an understanding of the theoretical bases of the trade or craft and/or develop the ancillary skills that enable the apprentice to successfully practice the trade in the world at large.

An employer who has an apprenticeship RSI program at an adult school or regional occupational program center can apply to move the program to a community college. If the college wants approval to offer the program, it must follow the procedures set forth in this handbook.

Because apprenticeships receive approval from another State agency (the Department of Industrial Relations), they are not sent to the California Postsecondary Education Commission (CPEC) for review. While this may expedite curriculum approval, the RSI approval may take additional time.

If the district intends to receive apprenticeship RSI funding, the Budget Act states that the program or courses must have the approval of the Chancellor’s Office. Thus the district must receive from the Chancellor’s Office both 1) curriculum approval; and 2) RSI funding approval. For both these approvals, the application must contain documentation that the apprenticeship has been approved by the Division of Apprenticeship Standards within the Department of Industrial Relations. The approval documentation must list the specific campus approved for the RSI, and must be signed by the Chief of the DAS or his designee.

Because funding of apprenticeship programs involves long range planning to provide adequate funding, it is important for the community college district to notify the Chancellor’s Office apprenticeship coordinator as soon as the district decides to give the employer or program sponsor a letter of intent to be the Local Educational Agency.
(LEA). This notification is to be used when working with a new apprenticeship program or applying for the transfer of an existing program from another community college, adult school, or regional occupational program center.
Request To AddProjected Program to Inventory

College  Modesto Junior College
District  Yosemite Comm. College District
Date Form Submitted  March 17, 2009

Contact Person  Pedro Mendez
Phone #  (209) 575-6355
E-mail  mendezp@mjc.edu

Name of Projected Program: Maintenance Mechanic Apprentice Program

Type of Program:  □ Certificate  □ Degree

Proposed T.O.P. Code  0945.00
Projected Start Date  September 1, 2009

Brief description or comments (optional):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPLICATION FOR APPROVAL—CREDIT OR NONCREDIT APPRENTICESHIP PROGRAM

California Community Colleges

Maintenance Mechanic
PROPOSED APPRENTICESHIP TITLE

Pedro Mendez
CONTACT PERSON

Modesto Junior College
COLLEGE

Yosemite Community College District
DISTRICT

Fall 2009
PROJECTED PROGRAM START DATE

☐ PROGRAM TRANSFER
Previous location:

Stanislaus County Area Manufacturing & Maintenance Joint Apprenticeship Program
EMPLOYER OR JAC SPONSORING APPRENTICESHIP

Modesto Junior College (East and West Campus)
TRAINING SITE(S)

☐ RELATED & SUPP. CREDIT COURSES ONLY
☐ RELATED & SUPP. NONCREDIT COURSES ONLY
☐ CERTIFICATE*
☐ A.A. DEGREE*
☐ A.S. DEGREE*

*Approval of a certificate or degree for apprentices does not provide approval of a certificate or degree for non-apprenticeship students. A separate approval is required for a corresponding non-apprenticeship program.

PLANNING SUMMARY

<table>
<thead>
<tr>
<th>Recommended T.O.P. Code</th>
<th>0945.00</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units for Major—Degree</td>
<td>22-24</td>
</tr>
<tr>
<td>Total Units for Degree</td>
<td>22-24</td>
</tr>
<tr>
<td>Required Units—Certificate</td>
<td>22-24</td>
</tr>
<tr>
<td>Est. Total RSI Hours in First Year</td>
<td>350</td>
</tr>
<tr>
<td>Est. Total RSI Hours in Second Year</td>
<td>700</td>
</tr>
<tr>
<td>Est. Total RSI Hours in Third Year</td>
<td>700</td>
</tr>
<tr>
<td>Estimated FTE Faculty Workload</td>
<td>0.278</td>
</tr>
<tr>
<td>Number of New Faculty Positions</td>
<td>0</td>
</tr>
<tr>
<td>Est. Cost, New Equipment</td>
<td>0</td>
</tr>
<tr>
<td>Type of New/Remodeled Facility</td>
<td>0</td>
</tr>
<tr>
<td>Est. Cost, Library Acquisitions</td>
<td>0</td>
</tr>
</tbody>
</table>

APPROVAL CRITERIA

Please provide the following for all programs:

1. **Statement of Program Goals and Objectives:**
   - Program prepares students (newly hired apprentices) toward occupation Maintenance Mechanic DOT Code: 638.281-014

   - Basic Occupational Competencies: **Work Processes**
     Instruction Basic Skills: (1) Observe and practice safe work habits at all times; (2) Work from sketches, drawings, prints, and verbal instruction; (3) Perform basic mathematical computations; (4) Use measuring devices (micrometers, calipers,
etc.); (5) Select proper materials for specific applications; (6) Select and use proper hand tools in a safe and effective manner; (7) Select and use portable power tools in a safe and effective manner

Instruction Mechanical Skills:  (1) Observe and apply basic mechanical principles; (2) Select and apply proper lubrication techniques and practices; (3) Install and repair basic drive components (chain, belts, sprockets, pulleys, gears, etc.); (4) Lubricate, inspect, and replace bearings; (5) Troubleshoot, inspect, repair and install various types of pumps; (6) Troubleshoot, inspect, repair and install equipment and plant systems, hydraulic systems, and pneumatic systems

Instruction Machining Operations:  (1) Fabricate, repair and modify parts with use of various shop machine tools (lathes, mills, saws, drill presses, grinders, sanders, etc.)

Instruction Welding and Cutting Operations:  (1) Select and utilize correct welding equipment, methods, and materials; (2) Prepare materials for welding operations; (3) Perform oxy/acetylene and electric arc welding of various materials; (4) Braze metal materials using oxy/acetylene gas; (5) Cut metal materials with oxy/acetylene torch

Performs Packaging Machinery Maintenance:  (1) Clean, operate, change over, repair, inspect, troubleshoot and install packaging machinery

Performs Rigging and Installation:  (1) Rig, relocate, and install equipment within plant facility

Maintains Processing Equipment:  (1) Clean, operate, repair, troubleshoot, and install processing equipment

Instruction Perform Basic Electrical Procedures:  (1) Troubleshoot equipment as to power availability; (2) Determine whether it's an electrical problem or mechanical; (3) Safety procedure when dealing with electrical equipment

2. **Catalog Description:** The Maintenance Mechanic Apprenticeship Program is designed for students hired as apprentices by member employers of the Stanislaus County Area Manufacturing and Maintenance Joint Apprenticeship Committee. The program is composed of a minimum of 594 hours of classroom and lab instruction and 8,000 hours of on-the-job training and is approximately 4 years in length. The program is designed so that the employer hires the apprentice, and the apprentice increases his/her occupational skills and knowledge through On-The-Job Training (OJT) at the employer site while attending specific college courses approved as related supplemental instruction (RSI) at Modesto Junior College. Students interested in more information about the program should contact the MJC Technical Education Office for a listing of member employers.

3. **Program Requirements:**

<table>
<thead>
<tr>
<th>Related Supplemental Instruction</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTEC 201 Introduction to Industrial Technology</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 203 Industrial Mechanical Components and Equipment</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 226 Motors and Motor Controls</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>Course</td>
<td>Hours</td>
<td>Units</td>
</tr>
<tr>
<td>----------------------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>INTEC 261 Introduction to Plant Maintenance</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 262 Hydraulics / Pneumatics</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 367 Plumbing Principles and Methods</td>
<td>72</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 306 Introduction to Occupational Safety and Health</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 362 Industrial Refrigeration Systems</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td>ENGTC 375 Construction Blueprint Reading</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td>MACH 301 Machine Shop</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>WELD 200 Arc and Gas Welding</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>WELD 204 Gas Metal Arc (MIG) and Flux Core Arc Welding</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>WELD 206 Gas Tungsten Arc Welding (TIG)</td>
<td>90</td>
<td>3</td>
</tr>
</tbody>
</table>

**Range of Hours Required** 594 – 666 22-24

****A minimum of 8 courses from the list above must be completed by each Apprentice based on previous experience and specific work requirements of Participating Company.

4. **Place of Program in Curriculum/Similar Programs:** The proposed Maintenance Mechanic Apprenticeship Program will be composed of similar courses with the following college Certificate and Degree Program: Industrial Technology - Maintenance. The apprenticeship program is not anticipated to pull students from these programs but rather add students designated as “apprentices” to common classes. This will enable students to move between programs given their employment (as an employee, student or apprentice). The programs will share instructional, classroom, technology, supplies and equipment resources.

5. **Outlines of Record for Required Courses:** (See Attached)

6. **Evidence of Division of Apprenticeship Standards Approval:** To achieve DAS approval the program must first be approved via the California Community College System approval process and then be forward to DAS for final approval. See attached letter from Barry Noonan.
**REQUIRED SIGNATURES**

Program: Maintenance Mechanic DOT Code: 638.281-014  
College: Modesto Junior College

**COLLEGE CURRICULUM APPROVAL**

Program and courses within the program have been approved by the curriculum committee and instructional administration, and satisfy all applicable requirements of Title 5 regulations.

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, Chair, Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Barbara Adams, Chair</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, Chief Instructional Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. Karen Walters-Dunlap</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, President, Academic Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jim Sahlman</td>
</tr>
</tbody>
</table>

**COLLEGE PRESIDENT**

All provisions of Title 5, Section 55130(b) have been considered. All factors, taken as a whole, support establishment and maintenance of the proposed apprenticeship program.

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, President of the College</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. Richard Rose</td>
</tr>
</tbody>
</table>

**DISTRICT APPROVAL**

On _____________, the governing board of ____________________________  
District approved the apprenticeship program attached to this application.

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, Superintendent/Chancellor of District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. Roe Darnell</td>
</tr>
<tr>
<td>College</td>
<td>Modesto Junior College</td>
</tr>
<tr>
<td>------------------</td>
<td>----------------------------------------</td>
</tr>
<tr>
<td>District</td>
<td>Yosemite Comm. College District</td>
</tr>
<tr>
<td>Date Form Submitted</td>
<td>March 17, 2009</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>SIGNATURE, CHIEF INSTRUCTIONAL OFFICER</th>
<th>Dr. Karen Walters-Dunlap</th>
</tr>
</thead>
</table>

**Name of Projected Program:** Electrician-Maintenance Apprentice Program

**Type of Program:**
- [ ] Certificate
- [x] Degree

**Proposed T.O.P. Code:** 0935.00

**Projected Start Date:** September 1, 2009

**Brief description or comments (optional):**

__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
__________________________________________________________________________
California Community Colleges

APPLICATION FOR APPROVAL—CREDIT OR NONCREDIT APPRENTICESHIP PROGRAM

<table>
<thead>
<tr>
<th>Electrician-Maintenance</th>
<th>Pedro Mendez</th>
</tr>
</thead>
<tbody>
<tr>
<td>PROPOSED APPRENTICESHIP TITLE</td>
<td>CONTACT PERSON</td>
</tr>
<tr>
<td>Modesto Junior College</td>
<td>Director of Technical Education</td>
</tr>
<tr>
<td>COLLEGE</td>
<td>TITLE</td>
</tr>
<tr>
<td>Yosemite Community College District</td>
<td>(209) 575-6355</td>
</tr>
<tr>
<td>DISTRICT</td>
<td>PHONE NUMBER</td>
</tr>
<tr>
<td>Fall 2009</td>
<td><a href="mailto:mendezp@mjc.edu">mendezp@mjc.edu</a></td>
</tr>
<tr>
<td>PROJECTED PROGRAM START DATE</td>
<td>E-MAIL ADDRESS</td>
</tr>
</tbody>
</table>

PROGRAM TRANSFER: Previous location:

Stanislaus County Area Manufacturing & Maintenance Joint Apprenticeship Program

EMPLOYER OR JAC SPONSORING APPRENTICESHIP

Modesto Junior College (East and West Campus)

TRAINING SITE(S)

- RELATED & SUPP. CREDIT COURSES ONLY
- RELATED & SUPP. NONCREDIT COURSES ONLY
- CERTIFICATE*
- A.A. DEGREE*
- A.S. DEGREE*

*Approval of a certificate or degree for apprentices does not provide approval of a certificate or degree for non-apprenticeship students. A separate approval is required for a corresponding non-apprenticeship program.

PLANNING SUMMARY

<table>
<thead>
<tr>
<th>Recommended T.O.P. Code</th>
<th>0935.00</th>
<th>Est. Total RSI Hours in Third Year</th>
<th>1,400</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units for Major—Degree</td>
<td>24</td>
<td>Estimated FTE Faculty Workload</td>
<td>0.278</td>
</tr>
<tr>
<td>Total Units for Degree</td>
<td>24</td>
<td>Number of New Faculty Positions</td>
<td>0</td>
</tr>
<tr>
<td>Required Units—Certificate</td>
<td>24</td>
<td>Est. Cost, New Equipment</td>
<td>0</td>
</tr>
<tr>
<td>Est. Total RSI Hours in First Year</td>
<td>700</td>
<td>Type of New/Remodeled Facility</td>
<td>0</td>
</tr>
<tr>
<td>Est. Total RSI Hours in Second Year</td>
<td>1,400</td>
<td>Est. Cost, Library Acquisitions</td>
<td>0</td>
</tr>
</tbody>
</table>

APPROVAL CRITERIA

Please provide the following for all programs:

1. **Statement of Program Goals and Objectives:**
   - Program prepares students (newly hired apprentices) toward occupation Electrician-Maintenance DOT Code 829.261-018

   - Basic Occupational Competencies: **Work Processes**

   Observes and applies shop practices in the operation and use of equipment, forklift, boom cranes, hand and power tools, and materials.

   Observes and performs work procedures, following State Safety Orders, company standards, and NEMA Standards
Installs and maintains PLC instrumentation
Installs, maintains and performs VFD configuration
Performs general sheet metal layout and fabrication, piping and valving, and basic electrical systems and controls
Repairs/Installs fixtures (interior and exterior lighting equipment, light service)
Repairs and maintains controls (electronic controlled equipment, AC-DC motors, power service, AC-DC generators, heating equipment, protective devices, switch boards, switch gear, transformers)
Repairs and maintains alarm systems (electronics controlled equipment, instrument and process controlled, and signal system)
Remodels and constructs wire, conduit, and switch installations. Follows safe procedures of handling low voltage single phase and three phase 0 to 600 volt circuits. Follows safe procedures of handling medium voltage three phase 601 volts to 15,000 volt circuits
Repairs and maintains electric motors
Performs instrument measuring, labor and material estimating, layout, and blueprint reading. Applies National Electric Code and Theory (Basic Elec.) AC-DC-3 Phase power distribution

2. **Catalog Description:** The Electrician-Maintenance Apprenticeship Program is designed for students hired as new apprentices by member employers of the Stanislaus County Area Manufacturing and Maintenance Joint Apprenticeship Committee. The program is composed of 756 hours of classroom and lab instruction and 8,000 hours of on-the-job training and is approximately 4 years in length. The program is designed so that the employer hires the apprentice, and the apprentice increases his/her occupational skills and knowledge through On-The-Job Training (OJT) at the employer site while attending specific college courses approved as related supplemental instruction (RSI) at Modesto Junior College. Students interested in more information about the program should contact the MJC Technical Education Office for a listing of member employers.

3. **Program Requirements:**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTEC 208 The World of Electricity and Electronics</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 205 Electronics Fabrication and Assembly Techniques</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 212 Digital Principles and Circuits</td>
<td>108</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 221 Instrumentation Devices and Systems</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 223 Industrial Electrical components and Control Devices</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 226 Motors, Controls and Controllers</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 229 Commercial and Industrial Wiring</td>
<td>108</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 232 Introduction to Programmable Logic Controllers</td>
<td>72</td>
<td>2</td>
</tr>
<tr>
<td>ELTEC 265 Troubleshooting</td>
<td>18</td>
<td>1</td>
</tr>
</tbody>
</table>

**Total Hours Required** 756 24
4. **Place of Program in Curriculum/Similar Programs:** The proposed Electrician-Maintenance Apprenticeship Program will be composed of similar courses with the following college Certificate and Degree Program: Industrial Technology-Electrician and the Maintenance Electrician. The apprenticeship program is not anticipated to pull students from these programs but rather add students designated as “apprentices” to common classes. This will enable students to move between programs given their employment situation as an employee, student or apprentice. The programs will share instructional, classroom, technology, supplies and equipment resources.

5. **Outlines of Record for Required Courses:** (See Attached)

6. **Evidence of Division of Apprenticeship Standards Approval:** To achieve DAS approval the program must first be approved via the California Community College System approval process and then be forward to DAS for final approval. See attached letter from Barry Noonan.

---

**REQUIRED SIGNATURES**

<table>
<thead>
<tr>
<th>Program</th>
<th>Electrician Maintenance DOT Code 829.261-018</th>
<th>College</th>
<th>Modesto Junior College</th>
</tr>
</thead>
</table>

**COLLEGE CURRICULUM APPROVAL**

Program and courses within the program have been approved by the curriculum committee and instructional administration, and satisfy all applicable requirements of Title 5 regulations.

<table>
<thead>
<tr>
<th>DATE</th>
<th>SIGNATURE, CHAIR, CURRICULUM COMMITTEE</th>
<th>Barbara Adams, Chair</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Typed or printed name</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATE</th>
<th>SIGNATURE, CHIEF INSTRUCTIONAL OFFICER</th>
<th>Dr. Karen Walters-Dunlap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Typed or printed name</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATE</th>
<th>SIGNATURE, PRESIDENT, ACADEMIC SENATE</th>
<th>Jim Sahlman</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Typed or printed name</td>
</tr>
</tbody>
</table>

**COLLEGE PRESIDENT**

All provisions of Title 5, Section 55130(b) have been considered. All factors, taken as a whole, support establishment and maintenance of the proposed apprenticeship program.

<table>
<thead>
<tr>
<th>DATE</th>
<th>SIGNATURE, PRESIDENT OF THE COLLEGE</th>
<th>Dr. Richard Rose</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Typed or printed name</td>
</tr>
</tbody>
</table>

**DISTRICT APPROVAL**

On ____________________________, the governing board of ____________________________ District approved the apprenticeship program attached to this application.

<table>
<thead>
<tr>
<th>DATE</th>
<th>SIGNATURE, SUPERINTENDENT/CHANCELLOR OF DISTRICT</th>
<th>Dr. Roe Darnell</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Typed or printed name</td>
</tr>
</tbody>
</table>
California Community Colleges

Request To Add Projected Program to Inventory

College Modesto Junior College
District Yosemite Comm. College District
Date Form Submitted March 17, 2009
Contact Person Pedro Mendez
Phone # (209) 575-6355
E-mail mendezp@mjc.edu

Name of Projected Program: Instrument Technician Apprentice Program
Type of Program: □ Certificate □ Degree
Proposed T.O.P. Code 0934.00
Projected Start Date September 1, 2009

Brief description or comments (optional):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPLICATION FOR APPROVAL—CREDIT OR NONCREDIT APPRENTICESHIP PROGRAM

Instrument Technician

PROPOSED APPRENTICESHIP TITLE

Modesto Junior College

COLLEGE

Yosemite Community College District

DISTRICT

Fall 2009

PROJECTED PROGRAM START DATE

Pedro Mendez

CONTACT PERSON

Director of Technical Education

TITLE

(209) 575-6355

PHONE NUMBER

mendezp@mjc.edu

E-MAIL ADDRESS

Stanislaus County Area Manufacturing & Maintenance Joint Apprenticeship Program

EMPLOYER OR JAC SPONSORING APPRENTICESHIP

Modesto Junior College (East and West Campus)

TRAINING SITE(S)

☐ RELATED & SUPP. CREDIT COURSES ONLY ☐ RELATED & SUPP. NONCREDIT COURSES ONLY

☐ CERTIFICATE* ☐ A.A. DEGREE* ☐ A.S. DEGREE*

*Approval of a certificate or degree for apprentices does not provide approval of a certificate or degree for non-apprenticeship students. A separate approval is required for a corresponding non-apprenticeship program.

PLANNING SUMMARY

<table>
<thead>
<tr>
<th>Recommended T.O.P. Code</th>
<th>0934.00</th>
<th>Est. Total RSI Hours in Third Year</th>
<th>700</th>
</tr>
</thead>
<tbody>
<tr>
<td>Units for Major—Degree</td>
<td>25</td>
<td>Estimated FTE Faculty Workload</td>
<td>0.278</td>
</tr>
<tr>
<td>Total Units for Degree</td>
<td>25</td>
<td>Number of New Faculty Positions</td>
<td>0</td>
</tr>
<tr>
<td>Required Units—Certificate</td>
<td>25</td>
<td>Est. Cost, New Equipment</td>
<td>0</td>
</tr>
<tr>
<td>Est. Total RSI Hours in First Year</td>
<td>350</td>
<td>Type of New/Remodeled Facility</td>
<td>0</td>
</tr>
<tr>
<td>Est. Total RSI Hours in Second Year</td>
<td>700</td>
<td>Est. Cost, Library Acquisitions</td>
<td>0</td>
</tr>
</tbody>
</table>

APPROVAL CRITERIA

Please provide the following for all programs:

1. **Statement of Program Goals and Objectives:**
   - Program prepares students (hired apprentices) toward occupation Instrument Technician DOT Code: 003.261-010
   - Basic Occupational Competencies: *Work Processes*

   - Reading schematics, PI&D diagrams, circuit drawings and operating instructions
   - Trouble shooting and improvement of control electronic systems
2. **Catalog Description:** The Instrument Technician Apprenticeship Program is designed for students hired as apprentices by member employers of the Stanislaus County Area Manufacturing and Maintenance Joint Apprenticeship Committee. The program is composed of 702 hours of classroom and lab instruction and 8,000 hours of on-the-job training and is approximately 4 years in length. The program is designed so that the employer hires the apprentice, and the apprentice increases his/her occupational skills and knowledge through On-The-Job Training (OJT) at the employer site while attending specific college courses approved as related supplemental instruction (RSI) at Modesto Junior College. Students interested in more information about the program should contact the MJC Technical Education Office for a listing of member employers.

3. **Program Requirements:**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ELTEC 208 World of Electricity and Electronics</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 376 Reading Schematics and Blueprints</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td>ELTEC 221 Instrumentation Devices and Systems</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 223 Industrial Elec. Comp. and Control Devices</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 229 Commercial and Industrial Wiring</td>
<td>108</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 226 Motors and Motor Controls</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 248 Electrical Codes and Ordinances</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>INTEC 261 Introduction to Plant Maintenance</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>ELTEC 232 Introduction to Programmable Logic Controllers</td>
<td>72</td>
<td>2</td>
</tr>
</tbody>
</table>

**Total Hours Required**: 702

4. **Place of Program in Curriculum/Similar Programs:** The proposed Instrument Technician Apprenticeship Program will be composed of similar courses
with the following college Certificate and Degree Program: Industrial Electronics. The apprenticeship program is not anticipated to pull students from these programs but rather add student designated as “apprentices” to common classes. This will enable students to move between programs given their employment (as an employee, student or apprentice). The programs will share instructional, classroom, technology, supplies and equipment resources.

5. **Outlines of Record for Required Courses:** (See Attached)

6. **Evidence of Division of Apprenticeship Standards Approval:** To achieve DAS approval the program must first be approved via the California Community College System approval process and then be forward to DAS for final approval. See attached Flow Grid provided by CCCCCO Apprenticeship Coordinator Dr. Barry Noonan.

**REQUIRED SIGNATURES**

Program: Instrument Technician DOT Code: 003.261-010  
College: Modesto Junior College

<table>
<thead>
<tr>
<th>COLLEGE CURRICULUM APPROVAL</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Program and courses within the program have been approved by the curriculum committee and instructional administration, and satisfy all applicable requirements of Title 5 regulations.</td>
<td></td>
</tr>
<tr>
<td>DATE</td>
<td>SIGNATURE, CHAIR, CURRICULUM COMMITTEE</td>
</tr>
<tr>
<td>DATE</td>
<td>SIGNATURE, CHIEF INSTRUCTIONAL OFFICER</td>
</tr>
<tr>
<td>DATE</td>
<td>SIGNATURE, PRESIDENT, ACADEMIC SENATE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLLEGE PRESIDENT</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>All provisions of Title 5, Section 55130(b) have been considered. All factors, taken as a whole, support establishment and maintenance of the proposed apprenticeship program.</td>
<td></td>
</tr>
<tr>
<td>DATE</td>
<td>SIGNATURE, PRESIDENT OF THE COLLEGE</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISTRICT APPROVAL</th>
<th></th>
</tr>
</thead>
</table>
| On ________________, the governing board of ____________________________  
District approved the apprenticeship program attached to this application. |  |
| DATE | SIGNATURE, SUPERINTENDENT/CHANCELLOR OF DISTRICT | Dr. Roe Darnell |
Name of Projected Program: Machinist Program

Type of Program:  □ Certificate  □ Degree

Proposed T.O.P. Code  0956.00

Projected Start Date  September 1, 2009

Brief description or comments (optional):

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
APPLICATION FOR APPROVAL—CREDIT OR NONCREDIT APPRENTICESHIP PROGRAM

Machinist

PROPOSED APPRENTICESHIP TITLE: Machinist

Pedro Mendez

CONTACT PERSON: Director of Technical Education

Modesto Junior College

COLLEGE

Yosemite Community College District

DISTRICT

Fall 2009

PROJECTED PROGRAM START DATE

☐ PROGRAM TRANSFER

Previous location:

Stanislaus County Area Manufacturing & Maintenance Joint Apprenticeship Program

EMPLOYER OR JAC SPONSORING APPRENTICESHIP

Modesto Junior College (East and West Campus)

TRAINING SITE(S)

☐ RELATED & SUPP. CREDIT COURSES ONLY

☐ RELATED & SUPP. NONCREDIT COURSES ONLY

☐ CERTIFICATE*

☐ A.A. DEGREE*

☐ A.S. DEGREE*

*Approval of a certificate or degree for apprentices does not provide approval of a certificate or degree for non-apprenticeship students. A separate approval is required for a corresponding non-apprenticeship program.

PLANNING SUMMARY

<table>
<thead>
<tr>
<th>Recommended T.O.P. Code</th>
<th>Est. Total RSI Hours in Third Year</th>
<th>Units for Major—Degree</th>
<th>Estimated FTE Faculty Workload</th>
</tr>
</thead>
<tbody>
<tr>
<td>0956.00</td>
<td>700</td>
<td>24-35</td>
<td>0.278</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Total Units for Degree</th>
<th>Number of New Faculty Positions</th>
<th>0</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-35</td>
<td>Est. Cost, New Equipment</td>
<td>0</td>
</tr>
<tr>
<td>35</td>
<td>Type of New/Remodeled Facility</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Required Units—Certificate</th>
<th>Est. Total RSI Hours in First Year</th>
<th>Est. Cost, Library Acquisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>24-35</td>
<td>350</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Est. Total RSI Hours in Second Year</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>700</td>
<td>0</td>
</tr>
</tbody>
</table>

APPROVAL CRITERIA

Please provide the following for all programs:

1. **Statement of Program Goals and Objectives:**
   - Program prepares students (hired apprentices) toward occupation Machinist DOT Code 600.280-022
   - Basic Occupational Competencies: **Work Processes**

Preliminary - assisting to acquire names and uses of hand tools, auxiliary machine tools and Tool Crib supplies and accessories

Drill Press - sensitive, heavy duty, and radial
2. **Catalog Description:** The Machinist Apprenticeship Program is designed for students hired as apprentices by member employers of the Stanislaus County Area Manufacturing and Maintenance Joint Apprenticeship Committee. The program is composed of a minimum of 747 hours of classroom and lab instruction and 8,000 hours of on-the-job training and is approximately 4 years in length. The program is designed so that the employer hires the apprentice, and the apprentice increases his/her occupational skills and knowledge through On-The-Job Training (OJT) at the employer site while attending specific college courses approved as related supplemental instruction (RSI) at Modesto Junior College. Students interested in more information about the program should contact the MJC Technical Education Office for a listing of member employers.

3. **Program Requirements:**

   **Related Supplemental Instruction**

<table>
<thead>
<tr>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>REQUIRED COURSES/COMPETENCY</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MACH301 Machine Shop 1*</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>MACH 302 Machine Shop 2*</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>MACH 303 Machine Shop 3*</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>MACH 218 Introduction to CNC Lathe*</td>
<td>72</td>
<td>2</td>
</tr>
<tr>
<td>MACH 219 Introduction to CNC Mill*</td>
<td>72</td>
<td>2</td>
</tr>
<tr>
<td>MACH 220 CNC Machine Tool Programming*</td>
<td>72</td>
<td>2</td>
</tr>
<tr>
<td>Course Name</td>
<td>Hours</td>
<td>Units</td>
</tr>
<tr>
<td>------------------------------------------------------</td>
<td>-------</td>
<td>-------</td>
</tr>
<tr>
<td>WELD 200 Arc and Gas Welding*</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>WELD 206 Gas Tungsten Arc*</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ENGTC 376 Mechanical Blueprint Reading*</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td>ENGTC 210 Introduction to Computer Aided Drafting*</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>747</strong></td>
<td><strong>24</strong></td>
</tr>
</tbody>
</table>

**ELECTIVE COURSES**

<table>
<thead>
<tr>
<th>Course Name</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CHEM 101 General Chemistry</td>
<td>108</td>
<td>4</td>
</tr>
<tr>
<td>CMPSC 201 General Computer Literacy</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td>ENGTC 211 Intermediate Topics in Computer Aided Drafting</td>
<td>27</td>
<td>1</td>
</tr>
<tr>
<td>ENGTC 223 Engineering Drafting and Design</td>
<td>72</td>
<td>2</td>
</tr>
<tr>
<td>ENGTC 250 Materials in Engineering</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>ENGTC 255 Statistics and Strength of Materials</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>MACH 221 CNC Programming Techniques</td>
<td>144</td>
<td>4</td>
</tr>
<tr>
<td>MACH 222 CNC Machine Operation</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td>MATH 70 Algebra</td>
<td>90</td>
<td>5</td>
</tr>
<tr>
<td>MATH 80 Geometry</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td>OFADM 364 Grammar in the Office</td>
<td>18</td>
<td>1</td>
</tr>
<tr>
<td>PHYS 165 Introductory Physics</td>
<td>108</td>
<td>4</td>
</tr>
<tr>
<td><strong>Sub Total</strong></td>
<td><strong>873</strong></td>
<td><strong>35</strong></td>
</tr>
</tbody>
</table>

Minimum Hours Required 747

4. **Place of Program in Curriculum/Similar Programs**: The proposed Machinist Apprenticeship Program will be composed of similar course with the following college Certificate and Degree Program: Machine Tool Technology. The apprenticeship program is not anticipated to pull students from these programs but rather add students designated as “apprentices” to common classes. This will enable students to move between programs given their employment need (as an employee, student or apprentice). The programs will share instructional, classroom, technology, supplies and equipment resources.

5. **Outlines of Record for Required Courses**: (See Attached)

6. **Evidence of Division of Apprenticeship Standards Approval**: To achieve DAS approval the program must first be approved via the California Community College System approval process and then be forward to DAS for final approval. See attached Flow Grid provided by CCCCO Apprenticeship Coordinator Dr. Barry Noonan.
## COLLEGE CURRICULUM APPROVAL

Program and courses within the program have been approved by the curriculum committee and instructional administration, and satisfy all applicable requirements of Title 5 regulations.

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, Chair, Curriculum Committee</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Barbara Adams, Chair</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, Chief Instructional Officer</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. Karen Walters-Dunlap</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, President, Academic Senate</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Jim Sahlman</td>
</tr>
</tbody>
</table>

## COLLEGE PRESIDENT

All provisions of Title 5, Section 55130(b) have been considered. All factors, taken as a whole, support establishment and maintenance of the proposed apprenticeship program.

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, President of the College</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. Richard Rose</td>
</tr>
</tbody>
</table>

## DISTRICT APPROVAL

On ____________, the governing board of ________________________________ District approved the apprenticeship program attached to this application.

<table>
<thead>
<tr>
<th>Date</th>
<th>Signature, Superintendent/Chancellor of District</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Dr. Roe Darnell</td>
</tr>
<tr>
<td>College</td>
<td>Modesto Junior College</td>
</tr>
<tr>
<td>---------------------</td>
<td>------------------------------------</td>
</tr>
<tr>
<td>District</td>
<td>Yosemite Comm. College District</td>
</tr>
<tr>
<td>Date Form Submitted</td>
<td>March 17, 2009</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DATE</th>
<th>SIGNATURE, CHIEF INSTRUCTIONAL OFFICER</th>
<th>Dr. Karen Walters-Dunlap</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Typed or Printed Name</td>
</tr>
</tbody>
</table>

Name of Projected Program: **Packaging Technician Apprentice Program**

Type of Program: □ Certificate □ Degree

Proposed T.O.P. Code **0945.00**

Projected Start Date **September 1, 2009**

Brief description or comments (optional):

_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
_________________________________________________________________________
APPLICATION FOR APPROVAL—CREDIT OR NONCREDIT APPRENTICESHIP PROGRAM

Packaging Technician
PROPOSED APPRENTICESHIP TITLE

Pedro Mendez
CONTACT PERSON

Modesto Junior College
COLLEGE

Director of Technical Education
TITLE

Yosemite Community College District
DISTRICT

(209) 575-6355
PHONE NUMBER

Fall 2009
PROJECTED PROGRAM START DATE

mendezp@mjc.edu
E-MAIL ADDRESS

☐ PROGRAM TRANSFER  Previous location:

Stanislaus County Area Manufacturing & Maintenance Joint Apprenticeship Program
EMPLOYER OR JAC SPONSORING APPRENTICESHIP

Modesto Junior College (East and West Campus)
TRAINING SITE(S)

☐ RELATED & SUPP. CREDIT COURSES ONLY  ☐ RELATED & SUPP. NONCREDIT COURSES ONLY

☐ CERTIFICATE*  ☐ A.A. DEGREE*  ☐ A.S. DEGREE*

*Approval of a certificate or degree for apprentices does not provide approval of a certificate or degree for non-apprenticeship students. A separate approval is required for a corresponding non-apprenticeship program.

PLANNING SUMMARY

<table>
<thead>
<tr>
<th>Recommended T.O.P. Code</th>
<th>Est. Total RSI Hours in Third Year</th>
<th>Units for Major—Degree</th>
<th>Estimated FTE Faculty Workload</th>
<th>Total Units for Degree</th>
<th>Number of New Faculty Positions</th>
<th>Required Units—Certificate</th>
<th>Est. Cost, New Equipment</th>
</tr>
</thead>
<tbody>
<tr>
<td>0945.00</td>
<td>700</td>
<td>22</td>
<td>0.278</td>
<td>22</td>
<td>0</td>
<td>22</td>
<td>0</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Est. Total RSI Hours in First Year</th>
<th>Type of New/Remodeled Facility</th>
<th>Est. Total RSI Hours in Second Year</th>
<th>Est. Cost, Library Acquisitions</th>
</tr>
</thead>
<tbody>
<tr>
<td>350</td>
<td>0</td>
<td>700</td>
<td>0</td>
</tr>
</tbody>
</table>

APPROVAL CRITERIA

Please provide the following for all programs:

1. **Statement of Program Goals and Objectives:**
   - Program prepares students (hired apprentices) toward occupation Packaging Technician DOT Code: 638.281-01X
     - Basic Occupational Competencies: **Work Processes**
       - Work with maintenance personnel on each type of packaging equipment
       - Reading and using packaging equipment blueprints and operating instructions
       - Analyze operating and maintenance problems for each piece of packaging equipment and develop corrective measures, including electrical, mechanical, pneumatic and hydraulic components
Develop and maintain materials and parts list to support maintenance
Order materials and parts necessary for installation and maintenance
Develop plan for installation of new packaging equipment and perform tasks necessary for installation, including mounting, leveling coordinating work of required crafts and start-up certification
Design and fabricate add-on or replacement accessories which are likely to require sheet metal layout and fabrication, welding and installation of mechanical components
Work with electrician performing initial wiring connections and maintenance of packaging equipment to learn system safety and operation.
Installation, programming and maintenance of PLC systems

2. **Catalog Description:** The Packaging Technician Apprenticeship Program is designed for students hired as apprentices by member employers of the Stanislaus County Area Manufacturing and Maintenance Joint Apprenticeship Committee. The program is composed of 594 hours of classroom and lab instruction and 8,000 hours of on-the-job training and is approximately 4 years in length. The program is designed so that the employer hires the apprentice, and the apprentice increases his/her occupational skills and knowledge through On-The-Job Training (OJT) at the employer site while attending specific college courses approved as related supplemental instruction (RSI) at Modesto Junior College. Students interested in more information about the program should contact the MJC Technical Education Office for a listing of member employers.

3. **Program Requirements:**

<table>
<thead>
<tr>
<th>Related Supplemental Instruction</th>
<th>Course Title</th>
<th>Hours</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>INTEC 376 Blueprint Reading</td>
<td>54</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>MACH 301 Machine Shop</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>WELD 200 Arc and Gas Welding</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>WELD 204 Gas Metal And Flux Core Welding, MIG and TIG</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELTEC 232 Introduction to Programmable Logic Controllers</td>
<td>72</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>INTEC 262 Hydraulics / Pneumatics</td>
<td>54</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>ELTEC 208 The World of Electricity and Electronics</td>
<td>90</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>SM 331 Sheet Metal and Installation</td>
<td>54</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Hours Required 594 22

4. **Place of Program in Curriculum/Similar Programs:** The proposed Instrument Technician Apprenticeship Program will be composed of similar courses with the following college Certificate and Degree Program: Industrial Technology-Technician. The apprenticeship program is not anticipated to pull students from these programs but rather add students designated as “apprentices” to common classes. This will enable students to move between programs given their employment (as an
employee, student or apprentice). The programs will share instructional, classroom, technology, supplies and equipment resources.

5. **Outlines of Record for Required Courses:** (See Attached)

6. **Evidence of Division of Apprenticeship Standards Approval:** To achieve DAS approval the program must first be approved via the California Community College System approval process and then be forward to DAS for final approval. See attached Flow Grid provided by CCCCO Apprenticeship Coordinator Dr. Barry Noonan.

**REQUIRED SIGNATURES**

Program: Packaging Technician DOT Code: 638.281-01X College: Modesto Junior College

<table>
<thead>
<tr>
<th>COLLEGE CURRICULUM APPROVAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program and courses within the program have been approved by the curriculum committee and instructional administration, and satisfy all applicable requirements of Title 5 regulations.</td>
</tr>
<tr>
<td><strong>Barbara Adams, Chair</strong></td>
</tr>
<tr>
<td><strong>DATE</strong></td>
</tr>
<tr>
<td><strong>Dr. Karen Walters-Dunlap</strong></td>
</tr>
<tr>
<td><strong>DATE</strong></td>
</tr>
<tr>
<td><strong>Jim Sahlman</strong></td>
</tr>
<tr>
<td><strong>DATE</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COLLEGE PRESIDENT</th>
</tr>
</thead>
<tbody>
<tr>
<td>All provisions of Title 5, Section 55130(b) have been considered. All factors, taken as a whole, support establishment and maintenance of the proposed apprenticeship program.</td>
</tr>
<tr>
<td><strong>Dr. Richard Rose</strong></td>
</tr>
<tr>
<td><strong>DATE</strong></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DISTRICT APPROVAL</th>
</tr>
</thead>
</table>
| On _____________, the governing board of ____________________________
District approved the apprenticeship program attached to this application. |
| **Dr. Roe Darnell** |
| **DATE** | **SIGNATURE, SUPERINTENDENT/CHANCELLOR OF DISTRICT** |
USING OUTLINE TOOL

To create a new outline, first click on the icon. Once you have clicked on the outline icon, an “I.” will appear in the text editor. You do not have to type the letters in front of each new level of the Icon. To increase the indent to the next level, hit the enter key. The enter key will move the cursor to the next line. Then click the increase indent icon. Make sure your cursor is on the line of text you want to decrease to the level of the outline and then click the decrease icon.

If you have followed the directions correctly your outline should be formatted similar to this one:
I. General System
   A. Defining specific accounting systems
   B. Selecting a system
   C. Computers and accounting systems
II. Accounting Programs
   A. Accounting software modules
   B. Using accounting software
   C. Recording monthly activity using accounting software
III. Integrated Spreadsheets
   A. Templates
   B. Automatic monthly and year-to-date financial statement presentation
   C. Providing and analyzing financial activity
   D. Creating graphs to show relationships
   E. Importing graphs into a word processing document
IV. Group analysis
   A. Group work creating alternative proposals for budgeting
   B. Group work to present and justify proposals
Course Outline

Page Last Saved on Thursday, Jan 12, 2006 at 12:50 PM
By Steve Thyberg

I. Bonds
   A. Financing corporations
   B. Characteristics of bonds payable
   C. The present-value concept and bonds payable
   D. Accounting for bonds payable
   E. Bond sinking funds
   F. Bond redemption
   G. Balance sheet presentation

II. Statement of Cash Flows
   A. Purpose of the statement of cash flows
   B. Reporting cash flows
   C. Operations: the indirect method
   D. Operations: the direct method
   E. Cash Flow Analysis

III. Financial Statement Analysis
   A. Basic analytical procedure

Path:  body > p