## PVCC CURRICULUM SHEET 2014-2015

**Physical & Natural Sciences**  
**Specialization in Biotechnology**  
**Associate of Science**  
**Code:** 880-06  
**Transfer Program**

Student Name: ___________________________  
Student ID Number: _______________________

### DEVELOPMENTAL COURSES (IF APPLICABLE)

<table>
<thead>
<tr>
<th>REQUIRED COURSES</th>
<th>COURSE DESCRIPTION</th>
<th>CREDITS</th>
<th>PLAN TO TAKE</th>
<th>GRADE</th>
</tr>
</thead>
<tbody>
<tr>
<td>SDV 100/101/108</td>
<td>Orientation</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>ENG 111</td>
<td>College Composition I</td>
<td>3</td>
<td></td>
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<tr>
<td>ENG 112</td>
<td>College Composition II</td>
<td>3</td>
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<tr>
<td>HIS ___</td>
<td>HIS 121 U.S. History I or HIS 101 History of Western Civilization I or HIS 111 History of World Civilization I</td>
<td>3</td>
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<tr>
<td>HIS ___</td>
<td>HIS 122 U.S. History II or HIS 102 History of Western Civilization II or HIS 112 History of World Civilization II</td>
<td>3</td>
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<tr>
<td>BIO 180</td>
<td>Introduction to Biotechnology Careers</td>
<td>1</td>
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<tr>
<td>BIO 101</td>
<td>General Biology I w/Laboratory</td>
<td>4</td>
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<tr>
<td>BIO 102</td>
<td>General Biology II w/Laboratory</td>
<td>4</td>
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<tr>
<td>BIO 206</td>
<td>Cell Biology</td>
<td>4</td>
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<tr>
<td>BIO 256</td>
<td>General Genetics</td>
<td>4</td>
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<tr>
<td>BIO/CHM 299</td>
<td>Supervised Study in Science</td>
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<tr>
<td>CHM 111</td>
<td>College Chemistry I w/Laboratory</td>
<td>4</td>
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<tr>
<td>CHM 112</td>
<td>College Chemistry II w/Laboratory</td>
<td>4</td>
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<tr>
<td>ITE 119</td>
<td>Information Literacy</td>
<td>3</td>
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<tr>
<td>HLT/PED</td>
<td>Health or Physical Ed Elective</td>
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<tr>
<td>MTH 163</td>
<td>Pre-Calculus¹</td>
<td>3</td>
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<tr>
<td>MTH ___</td>
<td>MTH 240 Statistics or MTH 157 Elementary Statistics or MTH 271 Applied Calculus</td>
<td>3</td>
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<tr>
<td>BIO ___</td>
<td>BIO 150 Microbiology or CHM 260 Biochemistry</td>
<td>3-4</td>
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<tr>
<td>CHM ___</td>
<td>Social Science Elective²</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>PHI ___</td>
<td>PHI 220 Ethics or PHI 227 Biomedical Ethics</td>
<td>3</td>
<td></td>
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</tr>
<tr>
<td>___ ___</td>
<td>Humanities Elective²</td>
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*Total Minimum Credits to Complete the A.S. Degree in Biotechnology = 61*

### Graduation Requirement:
Students entering all transfer degree programs are required to take one Writing Intensive Course, which has a prerequisite of **ENG 111 and ENG 112**, in order to graduate. Approved Writing Intensive Courses are specified with a "WI" section designation.

¹ Mathematics: Check with the intended transfer college or university to ensure that they appropriate math courses and sequencing are selected.

² List of courses that fulfill the requirement for Humanities Elective and Social Science Elective can be found on the back of this sheet.

³ Introductory (101 or 102 level) foreign language courses will not meet the humanities elective requirement for this program.
Sequence of PVCC Developmental English Courses
ENF 1 → ENF 3/ENG 111 or ENG 111
ENF 2 → ENF 3/ENG 111 or ENG 111

Sequence for ESL Students:
ESL 12 → ESL 13 → ENG 111

Sequence of PVCC Developmental Math Courses
MTE 1 → MTE 2 → MTE 3 → MTE 4 → MTE 5
↓
MTE 9 ← MTE 8 ← MTE 7 ← MTE 6

Approved Humanities Course Electives
ARA* 101, ARA 102, ARA 201, ARA 202
ART 100, ART 101, ART 102, ART 121, ART 122, ART 125, ART 131, ART 132, ART 138, ART 153, ART 154, ART 231, ART 232, ART 235, ART 236, ART 238, ART 241, ART 242, ART 249, ART 271, ART 272
ASL* 101, ASL 102, ASL 201, ASL 202
CHI* 101, CHI 102, CHI 201, CHI 202
CST 130, CST 131, CST 132, CST 141, CST 142, CST 229, CST 250
ENG 211, ENG 212, ENG 241, ENG 242, ENG 243, ENG 244, ENG 250, ENG 251, ENG 252, ENG 253, ENG 254, ENG 255, ENG 271, ENG 272, ENG 273, ENG 274, ENG 276
FRE* 101, FRE 102, FRE 201, FRE 202
GER* 101, GER 102, GER 201, GER 202
HUM 101, HUM 201, HUM 241, HUM 242, HUM 259
ITA* 101, ITA 102, ITA 201, ITA 202
JPN* 101, JPN 102, JPN 201, JPN 202
LAT* 101, LAT 102, LAT 201, LAT 202
MUS 121, MUS 122, MUS 221, MUS 222, MUS 225
PHI 100, PHI 101, PHI 102, PHI 111, PHI 200, PHI 220, PHI 227, PHI 260, PHI 266, PHI 276
REL 200, REL 210, REL 215, REL 216, REL 230, REL 233, REL 237, REL 240, REL 246
RUS* 101, RUS 102, RUS 201, RUS 202
SPA* 101, SPA 102, SPA 201, SPA 202

* 100 level foreign language courses may NOT be used to satisfy the humanities graduation requirement in programs where only one humanities course is required. In programs with two humanities courses, only one 100 level foreign language course may be used to satisfy the humanities graduation requirement.

Approved Mathematics Course Electives
MTH 152, MTH 157, MTH 163, MTH 164, MTH 173, MTH 174, MTH 180, MTH 240, MTH 271, MTH 277, MTH 279, MTH 286

Approved Science with Lab Course Electives
BIO 101, BIO 102, BIO 106, BIO 107, BIO 141, BIO 142, BIO 150, BIO 206, BIO 256, BIO 270
CHM 101, CHM 102, CHM 111, CHM 112, CHM 241, CHM 242, CHM 243, CHM 244, CHM 260, CHM 261
GOL 105, GOL 106, GOL 111
NAS 131, NAS 132
PHY 201, PHY 202, PHY 241, PHY 242

Approved Social Science Course Electives
ECO 201, ECO 202, ECO 245
GEO 210, GEO 220
HIS 101, HIS 102, HIS 111, HIS 112, HIS 121, HIS 122, HIS 127, HIS 141, HIS 142, HIS 211, HIS 269, HIS 270, HIS 276, HIS 277, HIS 281, HIS 282
PLS 120, PLS 135, PLS 211, PLS 212, PLS 215, PLS 216, PLS 225, PLS 241, PLS 242
PSY 200, PSY 215, PSY 225, PSY 230, PSY 235, PSY 236
SOC 200, SOC 215, SOC 225, SOC 236, SOC 252, SOC 266, SOC 268

Approved Transfer Electives
(All courses listed above also qualify as Transfer Electives)
ACC 211, ACC 212, ACC 213, ACC 214
ADJ 100, ADJ 133, ADJ 201, ADJ 227, ADJ 229, ADJ 232, ADJ 236
BUS 100
CSC 110, CSC 201, CSC 202, CSC 205
CST 100
ENG 111, 112, 121, 122, 210
EGR 115, EGR 120, EGR 126, EGR 240, EGR 245, EGR 246, EGR 248, EGR 255
GIS 200
ITD 110, ITD 130, ITE 119, ITE 120, ITE 150, ITE 221, ITP 120
MUS 101, 102, 111, 112, 211, 212

Note to students transferring credits TO PVCC: Transferred courses may fulfill a requirement under PVCC’s approved electives (above). To receive credit for a specific PVCC elective from transferred courses, registrar’s approval will be required.

Note to students transferring credits FROM PVCC TO FOUR-YEAR INSTITUTIONS: Although a course fulfills a requirement for a PVCC program, it is possible the same course will not fulfill a requirement at a four-year institution. Students who plan to transfer need to be aware of the four-year institution’s requirements.

Note: Students may petition the appropriate dean to substitute a course not listed on this list.