District Technical Review Workgroup - Instructional (DTRW-I)
AGENDA
December 11, 2014 - 1:00 – 3:00 p.m.
DAC, Lakin Boardroom

- Approval of November 13, 2014 Meeting Notes
- Curriculum Submissions

**MOORPARK COLLEGE**

*New Degree*
Emergency Medical Technician Proficiency Award, 7.0

**Deleted Degrees**
Accounting Principles Proficiency Award, 12.0-13.0
Associate in Science in Business Accounting, 28.0-32.0
Associate in Science in Business Management, 28.0-32.0
Associate in Science in Business Sales & Marketing, 28.0-32.0
Business Communication Proficiency Award, 2.0-13.0
Management Proficiency Award, 12.0
Marketing Proficiency Award, 12.0
Sales and Marketing Certificate of Achievement, 27.0-28.0
Small Business Proficiency Award, 12.0

**New Course**
PHSO M01H, Honors: Human Physiology, 4.0

**OXNARD COLLEGE**

*New Courses*
ACS R100, Automation and Control Systems, 4
ACS R110, Programmable Logic Controllers (PLCs), 4
ACT R016, Computer Aided Learning Math, 1
ACT R017, Skills for the Internet, 1
ANTH R118, Introduction to Forensic Science, 3
AT R011, Foundations of Automotive Technology, 3
AT R060, Automotive Business Management, 6
CNIT R150, Virtualization, 4
CNIT R151, Cloud Computing and Services, 4
HIST R122, Asian History, 3
LS R098, Short Courses in Learning Skills, 0.5-3
PHIL R115, Comparative World Religions, 3
PLS R124, Bankruptcy Law, 3
PLS R125, Business Organizations, 3
PLS R126, Probate Law, 3
PLS R127, Trusts and Estates, 3
THTR R198, Short Courses in Theatre, 0.5-3
URBS R101, Introduction to Urban Studies, 3

Revised Courses
ANTH R114, African American Culture and Experience Ethnology, 3
ART R115A, Abstract Concepts I, 3
ASL R101, American Sign Language 1, 4 3
ASL R102, American Sign Language 2, 4 3
BIOL R120, Principles of Biology I, 4
FT R170, Firefighter I Academy, 18 46
MICR R100, Principles of Microbiology, 3

New Programs
Proficiency Award in Airside Systems
Proficiency Award in Auto Body/Collision Repair
Proficiency Award in Auto Body Painting and Refinishing
Proficiency Award in Automotive Graphics
Proficiency Award in Electrical Systems for HVAC/R
Proficiency Award in Energy Auditing
Proficiency Award in Estimating Auto Body Damage & Advanced Repair
Proficiency Award in Heating and Hydronics
Proficiency Award in Lead Cook
Proficiency Award in Mechanical Systems for HVAC/R
Proficiency Award in Wireless Networking

VENTURA COLLEGE
New Courses
AUTO V11, Vehicle Maintenance for the Technician, 2
AUTO V12, Introduction to the Automotive Industry, 1
AUTO V30, Automatic Transmission Diagnosis and Repair, 2
AUTO V30L, Automatic Transmission Diagnosis and Repair Laboratory, 2
AUTO V33, Manual Transmissions and Driveline, 2
AUTO V33L, Manual Transmissions and Driveline Laboratory, 1
AUTO V34, Engine Repair, 2
AUTO V34L, Engine Repair Laboratory, 2
AUTO V38, Heating and Air Conditioning, 2
AUTO V38L, Heating and Air Conditioning Laboratory, 1
AUTO V42, Automotive Engine Management, 4
AUTO V43, Automotive Electronics, 2
AUTO V43L, Automotive Electronics Laboratory, 1.5
CD V10, Introduction to Children with Special Needs, 3
CD V20, Curriculum and Strategies for Children with Special Needs, 3
CD V23, Creative Experiences, Materials, and Environments in ECE, 3
CD V27, Infant and Toddler Development, 3
COUN V01, College Success, 3
COUN V02, Career Exploration and Life Planning, 3
Revised Courses
BUS V95, Business Internship I, 1-4
PHYS V02A, General Physics I: Algebra/Trigonometry-Based, 4
PHYS V02AL, General Physics I Laboratory: Algebra/Trigonometry-Based, 1
PHYS V02B, General Physics II: Algebra/Trigonometry-Based, 4
PHYS V02BL, General Physics II Laboratory: Algebra/Trigonometry-Based, 1
PHYS V04, Mechanics for Scientists and Engineers, 4
PHYS V04L, Mechanics Laboratory for Scientists and Engineers, 1
PHYS V05, Electricity and Magnetism for Scientists and Engineers, 4
PHYS V05L, Electricity and Magnetism Laboratory for Scientists and Engineers, 1
PHYS V06, Optics, Heat, and Modern Physics for Scientists and Engineers, 4
PHYS V06LOptics, Heat, and Modern Physics Laboratory for Scientists and Engineers, 1

OLD BUSINESS:
- BP/AP 4102 Occupational, Vocational, Technical Programs will stand alone from BP/AP 4020 Program, Curriculum, and Course Development.
- BP/AP 4050 Articulation – review revised AP (under review by Academic Senates – status update)
- BP/AP 4105 for Distance Education – Peter Sezzi/Patrick Jefferson – return to the December meeting after review at the campuses – no BP 4105 – needs development

NEW BUSINESS:
No submissions

Items under review at other workgroups/committees or on hold:
- BP/AP 4100 Graduation Requirements for Degrees and Certificates: from 9/18/14 DTRW-I – to Cabinet 9/22/14, Policy Committee 10/15/14, and was approved by Board of Trustees in November.
- BP/AP 5010 Admissions and Concurrent Enrollment: from 9/18/14 DTRW-SS -- to Cabinet 9/22/14, Policy Committee 10/15/14, and was approved by Board of Trustees in November.
- BP/AP 5015 Residence Determination: from 9/18/14 DTRW-SS -- to Cabinet 9/22/14, Policy Committee 10/15/14, and was approved by Board of Trustees in November.
- BP/AP 5020 Non Resident Tuition: from 9/18/14 DTRW-SS -- to Cabinet 9/22/14, Policy Committee 10/15/14, pulled from November Board meeting by Business Services, this item will go back to Policy Committee in January and to the Board in February.

Next Meeting Date: January 8, 2014 – 1 pm – DAC Lakin Boardroom
Submission deadline: January 2, 2014
Dr. Bennett welcomed everyone to DTRW-I and the meeting commenced at 1:03 pm. Introductions were made for a new member, Angelica Gonzales, Ventura College Counselor, representing Peter Sezzi at this meeting and will fill in for him during his sabbatical in spring 2015.

The October 9, 2014 meeting notes were approved with a minor change.

### CURRICULUM SUBMISSIONS

#### New Degrees/Courses/Revised Courses

Curriculum Submissions:
- There was general discussion regarding high unit classes and financial aid usage for transferring to CS or UC
<table>
<thead>
<tr>
<th>Agenda Item</th>
<th>Summary of Discussion</th>
<th>Action (If Required)</th>
<th>Completion Timeline</th>
<th>Assigned to:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moorpark/Oxnard/Ventura Submissions</td>
<td>universities. Dr. Bennett suggested development of information and statistics for a Board study session, which may be brought to the PACSS Committee prior to adding this issue to a future Board agenda.</td>
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<tr>
<td><strong>MOORPARK COLLEGE</strong></td>
<td><strong>Revised Degrees</strong></td>
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<tr>
<td></td>
<td>Associate in Science in Photography, 27.5</td>
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<td></td>
<td>Photography Certificate of Achievement, 21.5</td>
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<tr>
<td><strong>Recommendation:</strong> These revised degrees will go forward to Chancellor’s Cabinet, Consultation Council, and subsequently to the Board for full approval.</td>
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<td><strong>Revised Courses</strong></td>
<td>BIOL M12, Manufacturing: Cell Culture and Microbial Fermentation, 3.0</td>
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<td>BIOL M12D, Bioprocessing: Recovery and Purification, 2.0</td>
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<td></td>
<td>BIOT M02C, Manufacturing: Cell Culture and Microbial Fermentation, 3.0</td>
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<td></td>
<td>BIOT M02D, Bioprocessing: Recovery and Purification, 2.0</td>
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<td><strong>Recommendation:</strong> These revised courses will go forward to Chancellor’s Cabinet, Consultation Council, and subsequently to the Board for full approval.</td>
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<td><strong>OXNARD COLLEGE</strong></td>
<td><strong>New Courses</strong></td>
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<td>BIOL R155, Principles of Botany, 3 (will have a minor change to the description prior to submission to Board)</td>
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<td>BIOL R155L, Principles of Botany Laboratory, 1</td>
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<td>ESL R065, Preparation for Academic Reading/Writing, 4</td>
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<td>GEOG R106, Introduction to Geographic Information Systems and Techniques, 3</td>
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<td>THTR R111, Introduction to Theatre, 3</td>
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<td>THTR R151, Acting I, 3</td>
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<td>THTR R191, Theatre Production: Performance I, 3</td>
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<td><strong>Recommendation:</strong> These new courses will go forward to Chancellor’s</td>
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| Revised Courses     | Revised Courses
ECON R101, Introduction to the Principles of Macroeconomics, 3
ECON R102, Introduction to the Principles of Microeconomics, 3
FT 083B, Fire Command IB, 2.5
**Recommendation:**
These revised courses will go forward to Chancellor’s Cabinet, Consultation Council, and subsequently to the Board for full approval.                                                                                                                                                                                                                       |                      |                     |              |
| New Programs        | New Programs
AA-T in Economics
AS and Certificate of Achievement in Hospitality Management
**Recommendation:**
These new programs will go forward to Chancellor’s Cabinet, Consultation Council, and subsequently to the Board for full approval.                                                                                                                                                                                                                                   |                      |                     |              |
| VENTURA COLLEGE     | **New Degree**
Associate in Arts Degree for Transfer in Geology
**Recommendation:** This new degree will go forward to Chancellor’s Cabinet, Consultation Council, and subsequently to the Board for full approval.                                                                                                                                                                                                               |                      |                     |              |
| New Course          | **New Course**
GEOL V03L, Historical Geology Laboratory, 1
**Recommendation:** This new course will go forward to Chancellor’s Cabinet, Consultation Council, and subsequently to the Board for full approval.                                                                                                                                                                                                                      |                      |                     |              |
| Revised Courses     | **Revised Courses**
ENGL V01A, English Composition, 5 (minor change)                                                                                                                                                                                                                                                                                                           |                      |                     |              |

Cabinet, Consultation Council, and subsequently to the Board for full approval.
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<td></td>
<td>MATH V20, Precalculus Mathematics, 5 (Peter Sezzi will verify 5 units instead of 4 as listed in C-ID; minor change will be made to the course description) THA V10A, Production and Performance I, 1, 3 THA V10B, Production and Performance II, 2, 3 THA V10C11A Production I and Performance III, 3 THA V10D11B Production II and Performance IV, 3</td>
<td>Add to December agenda</td>
<td>12.05.14</td>
<td>Laurie Nusser</td>
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<tr>
<td>OLD BUSINESS</td>
<td></td>
<td>Add to December agenda</td>
<td>12.05.14</td>
<td>Laurie Nusser</td>
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<tr>
<td>BP/AP 4102 Occupational Vocational Technical Programs</td>
<td>This BP/AP will stand alone and will not be tied to BP/AP 4020 Program, Curriculum, and Course Development. This item will return to the December meeting after review at the campuses.</td>
<td>Add to December agenda</td>
<td>12.05.14</td>
<td>Laurie Nusser</td>
</tr>
<tr>
<td>BP/AP 4105 Distance Education</td>
<td>This item will return to the December meeting after review at the campuses.</td>
<td>Add to December agenda</td>
<td>12.05.14</td>
<td>Laurie Nusser</td>
</tr>
<tr>
<td>Articulated CTE courses- Credit/Noncredit to letter grades – Patrick Jefferson</td>
<td>This item will return after further review by CTE staff.</td>
<td>Add to December agenda</td>
<td>12.05.14</td>
<td>Peter Sezzi, Linda Kama’ila</td>
</tr>
<tr>
<td>BP 4050 no change AP 4050 Articulation – sent back from 4.14.14 and 9.20.14 Chancellor’s Cabinet for clarification.</td>
<td>This is still under Academic Senate review. Ms. Nusser will send out an action reminder to the Senates and add to the December agenda.</td>
<td>Review at Academic Senate meetings (sent by Laurie Nusser on 10.13.14)</td>
<td>ASAP</td>
<td>Mary Rees, Peter Sezzi, Linda Kama’ila</td>
</tr>
<tr>
<td>AP 4102 Occupational/Vocational Technical Programs (no</td>
<td>BP/AP 4102 will stand alone from BP/AP 4020. The revised version of BP 4102 will be sent to the group for review. This item will return to the December meeting.</td>
<td>Add to the December agenda</td>
<td>12.05.14</td>
<td>Laurie Nusser</td>
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<td>BP 4102 exists in BoardDocs and requires development) and BP/AP 4020 Program, Curriculum, and Course Development</td>
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<tr>
<td>BP/AP 4105 Distance Education</td>
<td>Dr. Bennett and Laurie Nusser will research the ACCJC Distance Education handbook to obtain a draft, as the CCLC version does not provide enough information.</td>
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<tr>
<td>Language for Math Courses &amp; Competency – Gloria Arevalo/Patrick Jefferson</td>
<td>Moorpark and Oxnard College curriculum committees require further review and this item will return to the December meeting.</td>
<td>Add to the December agenda</td>
<td>12.05.14</td>
<td>Laurie Nusser</td>
</tr>
<tr>
<td>BP/AP Status – Clare Geisen</td>
<td>The following items from DTRW-SS were approved by Chancellor’s Cabinet on September 22, 2014, to move forward to Policy Committee on October 15, 2014:</td>
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<tr>
<td></td>
<td>• BP/AP 4100 Graduation Requirements for Degrees and Certificates: from 9/18/14 DTRW-I – to Cabinet 9/22/14, Policy Committee 10/15/14, and Board in November.</td>
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<td>• BP/AP 5010 Admissions and Concurrent Enrollment: from 9/18/14 DTRW-SS – to Cabinet 9/22/14, Policy Committee 10/15/14, and Board in November.</td>
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<td></td>
<td>• BP/AP 5015 Residence Determination: from 9/18/14 DTRW-SS – to Cabinet 9/22/14, Policy Committee 10/15/14, and Board in November.</td>
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<td>• BP/AP 5020 Non Resident Tuition: from 9/18/14 DTRW-SS – to Cabinet 9/22/14, Policy Committee 10/15/14, and Board in November by request of Business Services.</td>
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<td>Adjournment</td>
<td>Dr. Bennett adjourned the meeting at 3:02 pm.</td>
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<tr>
<td>Next Meeting Date:</td>
<td>December 11, 2014 – 1 pm, DAC Lakin Boardroom</td>
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<tr>
<td>Submission deadline:</td>
<td>December 5, 2014</td>
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</table>
MOORPARK COLLEGE

New Degree

Emergency Medical Technician Proficiency Award 7.0

Deleted Degrees

Accounting Principles Proficiency Award 12.0-13.0
Associate in Science in Business Accounting 28.0-32.0
Associate in Science in Business Management 28.0-32.0
Associate in Science in Business Sales & Marketing 28.0-32.0
Business Communication Proficiency Award 12.0-13.0
Management Proficiency Award 12.0
Marketing Proficiency Award 12.0
Sales and Marketing Certificate of Achievement 27.0-28.0
Small Business Proficiency Award 12.0

New Course

PHSO M01H Honors: Human Physiology 4.0

DTRW 12-11-2014
New Degree

Emergency Medical Technician Proficiency Award

The Emergency Medical Technician Program prepares students to acquire the practical knowledge and skills to pass the National Registry Emergency Medical Technician (NREMT) certification examination and to function as an EMT in pre-hospital settings.

To earn a Proficiency Award in Emergency Medical Technician students must complete 7 specified units.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
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<tbody>
<tr>
<td>EMT M01</td>
<td>5.0</td>
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<tr>
<td>EMT M01L</td>
<td>2.0</td>
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</tbody>
</table>

**TOTAL UNITS**  7.0

Deleted Degrees

Accounting Principles Proficiency Award

To earn a Proficiency Award in Accounting Principles, students complete 12 or 13 specified units that provide basic training in accounting for entry level positions in accounting, transfer to a baccalaureate program in accounting, or basic accounting knowledge needed for advancement into various management positions.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT M02A  Financial Accounting I</td>
<td>3.0</td>
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<tr>
<td>ACCT M02B  Financial Accounting II</td>
<td>3.0</td>
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<tr>
<td>ACCT M120  Managerial Accounting</td>
<td>3.0</td>
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<tr>
<td>ACCT M08  Accounting with QuickBooks</td>
<td>3.0</td>
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<td>or</td>
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<tr>
<td>CIS M16   Introduction to Information Systems</td>
<td>4.0</td>
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</tbody>
</table>

**TOTAL UNITS**  12.0-13.0
Associate in Science in Business Accounting

Study in business leads to a wide range of opportunities in a variety of industries such as banking, health care/biotechnology, law, entertainment, defense, computer/electronics, and education, as well as in government and non-profit organizations.

Upon completion of the baccalaureate degree, the student will be prepared for a career in specialized areas such as accounting, finance, investments, real estate, marketing, office administration, management, production, operations management, operations research, and statistics. Upon completion of the associate degree, the student will be prepared for various entry-level positions within these same organizations, for promotion from technical and specialty job functions into management positions, and/or for transfer to a baccalaureate program.

To earn an Associate in Science Degree with a major in Business, students complete 28–32 specified units, plus General Education Degree Requirements (minimum total = 60 units).

Required Courses

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<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>ACCT M02A</td>
<td>Financial Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT M02B</td>
<td>Financial Accounting II</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M30</td>
<td>Introduction to Business</td>
<td>3.0</td>
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<tr>
<td>BUS M31</td>
<td>Introduction to Management</td>
<td>3.0</td>
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<tr>
<td>BUS M33</td>
<td>Business Law</td>
<td>3.0</td>
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<td>or</td>
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<tr>
<td>BUS M34</td>
<td>Legal Environment of Business</td>
<td>3.0</td>
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<tr>
<td>BUS M39</td>
<td>Business Communication</td>
<td>3.0</td>
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<td>or</td>
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<tr>
<td>BUS M28</td>
<td>Business English</td>
<td>3.0</td>
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<tr>
<td>CIS M16</td>
<td>Introduction to Information Systems</td>
<td>4.0</td>
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Units from One of the OPTIONS below 6–10

OPTIONS: Choose one of the following options

Management Option – Choose 6 Units from the Following Units

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS M32</td>
<td>Entrepreneurship and Small Business Management</td>
<td>3.0</td>
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<tr>
<td>BUS M42</td>
<td>Business and Society</td>
<td>3.0</td>
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<tr>
<td>BUS M45</td>
<td>Human Resources Management</td>
<td>3.0</td>
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<tr>
<td>BUS M54</td>
<td>Organizational Behavior 3</td>
<td>3.0</td>
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or

Sales & Marketing Option – Choose 6 Units from the Following Units

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<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
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<tbody>
<tr>
<td>BUS M35</td>
<td>Sales Techniques</td>
<td>3.0</td>
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</table>

DTRW 12-11-2014
**BUS M37**  Marketing  3.0
**BUS M38**  Advertising  3.0
or
**Accounting Option**—Complete All of the Following Units
**CIS M14**  10-Key Mastery on the Computer  1.0
**CIS M24**  Microsoft Excel Part I  1.5
**CIS M25**  Microsoft Excel Part II  1.5
**ACCT M120**  Managerial Accounting  3.0
**ACCT M08**  Accounting with QuickBooks  3.0

**TOTAL UNITS**  28.0-32.0

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**Associate in Science in Business Management**

Study in business leads to a wide range of opportunities in a variety of industries such as banking, healthcare/biotechnology, law, entertainment, defense, computer/electronics, and education, as well as in government and non-profit organizations.

Upon completion of the baccalaureate degree, the student will be prepared for a career in specialized areas such as accounting, finance, investments, real estate, marketing, office administration, management, production, operations management, operations research, and statistics. Upon completion of the associate degree, the student will be prepared for various entry-level positions within these same organizations, for promotion from technical and specialty job functions into management positions, and/or for transfer to a baccalaureate program.

To earn an Associate in Science Degree with a major in Business, students complete 28-32 specified units, plus General Education Degree Requirements (minimum total = 60 units).

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<tr>
<td>BUS M30</td>
<td>Introduction to Business</td>
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<tr>
<td>BUS M31</td>
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<td>or BUS M39</td>
<td>Business Communication</td>
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<tr>
<td>or BUS M28</td>
<td>Business English</td>
</tr>
</tbody>
</table>
CIS M16   Introduction to Information Systems     4.0

Units from One of the OPTIONS below 6—10

OPTIONS: Choose one of the following options

Management Option – Choose 6 Units from the Following Units
BUS M32   Entrepreneurship and Small Business Management    3.0
BUS M42   Business and Society    3.0
BUS M51   Human Resources Management    3.0
BUS M54   Organizational Behavior    3.0

or

Sales & Marketing Option – Choose 6 Units from the Following Units
BUS M35   Sales Techniques    3.0
BUS M37   Marketing    3.0
BUS M38   Advertising    3.0

or

Accounting Option – Complete All of the Following Units
CIS M14   10-Key Mastery on the Computer      1.0
CIS M24   Microsoft Excel Part I    1.5
CIS M25   Microsoft Excel Part II    1.5
ACCT M120   Managerial Accounting    3.0
ACCT M08   Accounting with QuickBooks    3.0

TOTAL UNITS               28.0-32.0

Associate in Science in Business Sales and Marketing

Study in business leads to a wide range of opportunities in a variety of industries such as banking, health care/biotechnology, law, entertainment, defense, computer/electronics, and education, as well as in government and non-profit organizations.

Upon completion of the baccalaureate degree, the student will be prepared for a career in specialized areas such as accounting, finance, investments, real estate, marketing, office administration, management, production, operations management, operations research, and statistics. Upon completion of the associate degree, the student will be prepared for various entry-level positions within these same organizations, for promotion from technical and specialty job functions into management positions, and/or for transfer to a baccalaureate program.

To earn an Associate in Science Degree with a major in Business, students complete 28—32 specified units, plus General Education Degree Requirements (minimum total = 60 units).
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT M02A</td>
<td>Financial Accounting I</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT M02B</td>
<td>Financial Accounting II</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M40</td>
<td>Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M31</td>
<td>Introduction to Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M33</td>
<td>Business Law</td>
<td>3.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS M34</td>
<td>Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M39</td>
<td>Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BUS M28</td>
<td>Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS M16</td>
<td>Introduction to Information Systems</td>
<td>4.0</td>
</tr>
</tbody>
</table>

Units from One of the OPTIONS below 6 - 10

**OPTIONS: Choose one of the following options**

**Management Option – Choose 6 Units from the Following Units**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M32</td>
<td>Entrepreneurship and Small-Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M42</td>
<td>Business and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M51</td>
<td>Human Resources Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M54</td>
<td>Organizational Behavior</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**or**

**Sales & Marketing Option – Choose 6 Units from the Following Units**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M35</td>
<td>Sales Techniques</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M37</td>
<td>Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M38</td>
<td>Advertising</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**or**

**Accounting Option – Complete All of the Following Units**

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CIS M14</td>
<td>10-Key Mastery on the Computer</td>
<td>1.0</td>
</tr>
<tr>
<td>CIS M24</td>
<td>Microsoft Excel Part I</td>
<td>1.5</td>
</tr>
<tr>
<td>CIS M25</td>
<td>Microsoft Excel Part II</td>
<td>1.5</td>
</tr>
<tr>
<td>ACCT M120</td>
<td>Managerial Accounting</td>
<td>3.0</td>
</tr>
<tr>
<td>ACCT M08</td>
<td>Accounting with QuickBooks</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 28.0-32.0
### Business Communication Proficiency Award

To earn a Proficiency Award in Business Communication, students complete 12 or 13 specified units that offer skills necessary for effective business communication.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M28 Business English</td>
<td>3.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>BUS M39 Business Communication</td>
<td>3.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>BUS M56 Business and Professional Speech</td>
<td>3.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>COMM M01 Introduction to Speech</td>
<td>3.0</td>
</tr>
<tr>
<td>CIS M28 Microsoft Office</td>
<td>3.0</td>
</tr>
<tr>
<td>ENGL M01A English Composition</td>
<td>4.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>ENGL M02 Introduction to College Writing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**TOTAL UNITS** 12.0-13.0

### Management Proficiency Award

To earn a Proficiency Award in Management, students complete 12 specified units that offer fundamental skills often needed for entry-level management positions.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M30 Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M31 Introduction to Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M42 Business and Society</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M51 Human Resources Management</td>
<td>3.0</td>
</tr>
<tr>
<td>or</td>
<td></td>
</tr>
<tr>
<td>BUS M54 Organizational Behavior</td>
<td>3.0</td>
</tr>
</tbody>
</table>

**NOTE:** Add 15-16 specified units to this Management Proficiency Award and earn the Management Certificate of Achievement below

**TOTAL UNITS** 12.0

DTRW 12-11-2014
Marketing Proficiency Award

To earn a Proficiency Award in Marketing, students complete 12 specified units to prepare for entry-level positions in marketing or advertising.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M30</td>
<td>Introduction to Business</td>
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<td>Introduction to Management</td>
<td>3.0</td>
</tr>
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<td>BUS M37</td>
<td>Marketing</td>
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</tr>
<tr>
<td>BUS M38</td>
<td>Advertising</td>
<td>3.0</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M35</td>
<td>Sales Techniques</td>
<td>3.0</td>
</tr>
</tbody>
</table>

NOTE: Add 15–16 specified units to this Marketing Proficiency Award and earn the Marketing/Sales Certificate of Achievement below

TOTAL UNITS 12.0

Sales and Marketing Certificate of Achievement

To earn a Certificate of Achievement in Sales and Marketing, students complete 27 or 28 specified units that offer training in marketing, sales, and advertising for those seeking positions as marketing or sales managers or transferring to a baccalaureate program.

Required Courses

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M30</td>
<td>Introduction to Business</td>
<td>3.0</td>
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<tr>
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<td>Introduction to Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M33</td>
<td>Business Law</td>
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</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M34</td>
<td>Legal Environment of Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M35</td>
<td>Sales Techniques</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M37</td>
<td>Marketing</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M38</td>
<td>Advertising</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M39</td>
<td>Business Communication</td>
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</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
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<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M28</td>
<td>Business English</td>
<td>3.0</td>
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<tr>
<td>BUS M42</td>
<td>Business and Society</td>
<td>3.0</td>
</tr>
</tbody>
</table>

or

<table>
<thead>
<tr>
<th>Course</th>
<th>Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS M54</td>
<td>Organizational Behavior</td>
<td>3.0</td>
</tr>
</tbody>
</table>

DTRW 12-11-2014
CIS M16 Introduction to Information Systems 4.0
or
CIS M28 Microsoft Office 3.0

NOTE: Add 18 or 19 specified units to this Small Business Career Certificate of Completion and earn the Management Certificate of Achievement or the Marketing/Sales Certificate of Achievement above

TOTAL UNITS 27.0-28.0

**Small Business Proficiency Award**

To earn a Proficiency Award in Small Business, students complete 12 specified units to prepare for starting or managing a small business.

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACCT M01A Accounting Procedures I</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M30 Introduction to Business</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M32 Small Business Management</td>
<td>3.0</td>
</tr>
<tr>
<td>BUS M37 Marketing</td>
<td>3.0</td>
</tr>
</tbody>
</table>

TOTAL UNITS 12.0
New Course

PHSO M01H  Honors: Human Physiology  4.0
Prerequisites:  ANAT M01 or concurrent enrollment and 1 year of high school Chemistry (or higher)
Recommended Prep:  BIOL M01 or BIOL M02A and ENGL M02 and MATH M03
Hours:  3 lecture, 3 lab

Studies the physiological principles, function, integration and homeostasis of the human body at the cellular, tissue, organ, organ system and organism level: integumentary system, bone, skeletal system, smooth and cardiac muscles, nervous system, sensory organs, cardiovascular system, lymphatic and immune systems, respiratory system, urinary system, digestive system, endocrine system, and reproductive system. Utilizes laboratory computer simulations and experiments to demonstrate basic principles and introduce physiological techniques and instruments. Honors work challenges students to be more analytical and creative through expanded assignments, real-world applications, and enrichment opportunities. This course is primarily intended for Nursing, Allied Health, Kinesiology, and other health-related majors. Students cannot complete both PHSO M01 and PHSO M01H because credit will only be awarded to the first course completed. Applies to Associate Degree. Transfer credit: CSU. Credit Limitation: UC - PHSO M01 or PHSO M01H, ANPH M01 and ANAT M01 combined: maximum credit, one course.
### New Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACS R100</td>
<td>Automation and Control Systems</td>
<td>4</td>
</tr>
<tr>
<td>ACS R110</td>
<td>Programmable Logic Controllers (PLCs)</td>
<td>4</td>
</tr>
<tr>
<td>ACT R016</td>
<td>Computer Aided Learning Math</td>
<td>1</td>
</tr>
<tr>
<td>ACT R017</td>
<td>Skills for the Internet</td>
<td>1</td>
</tr>
<tr>
<td>ANTH R118</td>
<td>Introduction to Forensic Science</td>
<td>3</td>
</tr>
<tr>
<td>AT R011</td>
<td>Foundations of Automotive Technology</td>
<td>3</td>
</tr>
<tr>
<td>AT R060</td>
<td>Automotive Business Management</td>
<td>6</td>
</tr>
<tr>
<td>CNIT R150</td>
<td>Virtualization</td>
<td>4</td>
</tr>
<tr>
<td>CNIT R151</td>
<td>Cloud Computing and Services</td>
<td>4</td>
</tr>
<tr>
<td>HIST R122</td>
<td>Asian History</td>
<td>3</td>
</tr>
<tr>
<td>LS R098</td>
<td>Short Courses in Learning Skills</td>
<td>0.5-3</td>
</tr>
<tr>
<td>PHIL R115</td>
<td>Comparative World Religions</td>
<td>3</td>
</tr>
<tr>
<td>PLS R124</td>
<td>Bankruptcy Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS R125</td>
<td>Business Organizations</td>
<td>3</td>
</tr>
<tr>
<td>PLS R126</td>
<td>Probate Law</td>
<td>3</td>
</tr>
<tr>
<td>PLS R127</td>
<td>Trusts and Estates</td>
<td>3</td>
</tr>
<tr>
<td>THTR R198</td>
<td>Short Courses in Theatre</td>
<td>0.5-3</td>
</tr>
<tr>
<td>URBS R101</td>
<td>Introduction to Urban Studies</td>
<td>3</td>
</tr>
</tbody>
</table>

### Revised Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ANTH R114</td>
<td>African American Culture and Experience Ethnology</td>
<td>3</td>
</tr>
<tr>
<td>ART R115A</td>
<td>Abstract Concepts I</td>
<td>3</td>
</tr>
<tr>
<td>ASL R101</td>
<td>American Sign Language 1</td>
<td>4</td>
</tr>
<tr>
<td>ASL R102</td>
<td>American Sign Language 2</td>
<td>4</td>
</tr>
<tr>
<td>BIOL R120</td>
<td>Principles of Biology I</td>
<td>4</td>
</tr>
<tr>
<td>FT R170</td>
<td>Firefighter I Academy</td>
<td>18-16</td>
</tr>
<tr>
<td>MICR R100</td>
<td>Principles of Microbiology</td>
<td>3</td>
</tr>
</tbody>
</table>

### New Programs

- Proficiency Award in Airside Systems
- Proficiency Award in Auto Body/Collision Repair
- Proficiency Award in Auto Body Painting and Refinishing
- Proficiency Award in Automotive Graphics
- Proficiency Award in Electrical Systems for HVAC/R
- Proficiency Award in Energy Auditing
- Proficiency Award in Estimating Auto Body Damage & Advanced Repair
- Proficiency Award in Heating and Hydronics
- Proficiency Award in Lead Cook
- Proficiency Award in Mechanical Systems for HVAC/R
- Proficiency Award in Wireless Networking
ACS R100  Automation and Control Systems     4 Units
Hours:   3.0 lecture, 3.0 lab
Prerequisites:  ENVT R020 and ENVT R021L

This course provides instruction in the principles, operation, and implementation of automation and process control systems used in many industries including but not limited to the following: pharmaceutical/biotechnology, agricultural, manufacturing, water/wastewater, green energy, and HVAC/R. Control types covered in this course include direct digital controls (DDC), programmable logic controls (PLC), building automation systems (BAS) and pneumatic controls. Field trips may be required.

Transfer credit: CSU.

ACS R110  Programmable Logic Controllers PLCs    4 Units
Hours:   3.0 lecture, 3.0 lab
Prerequisites:  ENVT R020, ENVT R020L and ENVT R021L

This is an introductory course on the principles of how PLCs function. This course provides practical information about installing, programming, and maintaining PLC systems. Students receive instruction and training to help them achieve the industry qualifications needed to work in the high growth area of automation. Field trips may be required.

Transfer credit: CSU.

ACT R016  Computer Aided Learning Math      1 Unit
Hours:   0.5 lecture, 1.5 lab
Corequisites:  LS R016A or LS R016B or MATH R001

Students with learning disabilities will be able to take this course while currently enrolled in any basic math course at Oxnard College to use computers to aid with their retention and learning of mathematics. Not applicable for degree credit. Course is offered on a Pass/No Pass (P/NP) basis only.

ACT R017  Skills for the Internet       1 Unit
Hours:   0.5 lecture, 1.5 lab
Prerequisite:  None

This course is designed to teach students the basic internet computer skills, techniques, and assistive computer technology that will enable them to be successful in accessing the Internet and email. Specifically, the course will review software that will accommodate students with disabilities to aid in using the internet. Student will learn the difference between academic and non-academic sources. Students will utilize and practice skills in individualized weekly research, presentations and website review assignments that will focus on developing better overall research skills as well as computing skills. Not applicable for degree credit. Course is offered on a Pass/No Pass (P/NP) basis only.
ANTH R118  Introduction to Forensic Science     3 Units
Hours:   3.0 lecture
Prerequisite:  None

This course introduces students to the fields of forensic science and forensic anthropology. Utilizing a variety of forensic disciplines including anthropology, osteology, odontology, entomology, profiling and criminalistics, we apply these sciences to crime scene investigation, to benefit legal processes and to the analysis of human remains. Students will explore the use of DNA as a tool of identification, the use of human remains to identify individuals and cause of death, blood spatter analysis, ballistics, fingerprinting and criminal profiling. Field trips may be required.

Transfer credit: CSU.

AT R011  Foundations of Automotive Technology    3 Units
Hours:   2.5 lecture, 1.5 lab
Advisory:  AT R010

This is a companion class to Fundamentals of Automotive Technology (AT R010). It will focus on teaching the skills necessary for a student to be successful in all other courses in the Automotive Technology program. These skills will include, but are not limited to, information acquisition and retrieval; writing repair orders and related documents; hardware identification, use and repair; gasket, seal and sealants use; bearing identification & repair; fluid services; wheel & tire service. Field trips may be required.

AT R060  Automotive Business Management     6 Units
Hours:   5.0 lecture, 3.0 lab
Advisory:  AT R010

This course covers the automotive service management operations of an automotive business/dealership as related to service advisor/manager by focusing on the repair order as a legal document, appointment systems, telephone skills, communication strategies, product knowledge, selling skills, customer handling, warranties, and cost reduction methods. Successful completion of the class will prepare students for the ASE Automobile Service Consultant (C1) Exam. Course is offered Pass/No Pass at student’s option. Field trips may be required.

CNIT R150  Virtualization        4 Units
Hours:   3.0 lecture, 3.0 lab
Prerequisites:  CNIT R120 or CNIT R144
Advisory:  CNIT R101

This course covers the general concepts of virtual computing including desktop and server virtualization. Students will install and configure virtualization software from multiple vendors. Field trips may be required.

Transfer credit: CSU.
<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
<th>Hours:</th>
<th>Prerequisite</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT R151</td>
<td>Cloud Computing and Services</td>
<td>4</td>
<td>3.0 lecture, 3.0 lab</td>
<td>CNIT R101</td>
</tr>
<tr>
<td>HIST R122</td>
<td>Asian History</td>
<td>3</td>
<td>3.0 lecture</td>
<td>None</td>
</tr>
<tr>
<td>LS R098</td>
<td>Short Courses in Learning Skills</td>
<td>0.5-3</td>
<td>Lecture and/or lab hours as required by unit formula</td>
<td>None</td>
</tr>
<tr>
<td>PHIL R115</td>
<td>Comparative World Religions</td>
<td>3</td>
<td>3.0 lecture</td>
<td>ENGL R096</td>
</tr>
</tbody>
</table>

This course educates students about cloud computing, cloud deployment and service models, cloud infrastructure, cloud backup and storage, security issues related to the cloud, and how to leverage the cloud for cost savings. Field trips may be required.

*Transfer credit: CSU.*

Students will greatly benefit from studying the Asian History, because trends indicate that Asia will likely become the dominate region in our 21st century global community. Thus we will explore the rich history and cultural heritage of Eastern Civilization (centered on China, but including Japan and Korea), South Asia (centered on India), and Southeast Asia (which includes places like the Philippines and Vietnam). Ancient and modern topics will include the dynastic and Confucianist traditions of China, the eastern religions arising from India (like Buddhism), the influence of the Spice Islands and the Silk Road on global trade, the impacts of the industrialization and European imperialism on Asia, the reorientation of Asia due to World War II and national liberation movements (like the Vietnam War), and the unprecedented growth of Asia in recent decades. Field trips may be required.

*Transfer credit: CSU.*

Selected topics in learning skills area designed to meet the needs of learning disabled students. Not applicable for degree credit. Course is offered Pass/No Pass at student’s option.

This course explores and compares the origins, beliefs, rituals, and ideals of the major world religions. Religions discussed include: Hinduism, Buddhism, Taoism, Confucianism, Judaism, Christianity, and Islam. Further, one or more of the following traditions may also be examined: Shinto, Jainism, Sikhism, Zoroastrianism, Greek, Roman, as well as indigenous traditions. Field trips may be required.

*Transfer credit: CSU.*
PLS R124  Bankruptcy Law  3 Units
Hours:  3.0 lecture
Prerequisite:  None

This course is designed to teach substantive bankruptcy law and procedure for paralegals. It will explore the appropriateness of bankruptcy filing, voluntary Chapter 7 liquidations, Chapter 13 bankruptcy petitions, Chapter 12 bankruptcy petitions, Chapter 11 reorganizations, and involuntary Chapter 7 petitions. It will cover the practical aspects of gathering information and creating the appropriate bankruptcy case forms. Field trips may be required.

Transfer credit: CSU.

PLS R125  Business Organizations  3 Units
Hours:  3.0 lecture
Prerequisite:  None

This course is designed to assist the paralegal in learning how to create different business organizations with a strong foundation in legal theory. The course will explore the creation, characteristics, advantages and disadvantages of business organizations from the sole proprietorship to the corporation and will also address concepts such as shareholder agreements and the business judgment rule. This course will also stress learning in creating and maintaining these business organizations. Field trips may be required.

Transfer credit: CSU.

PLS R126  Probate Law  3 Units
Hours:  3.0 lecture
Prerequisite:  None

This course will cover the various types of documents a paralegal might be involved in drafting in a typical probate and estate planning practice. Such documents include, but are not limited to, wills, trusts, powers of attorney, and advance health care directives. Paralegal students will become familiar with the various forms of complex estate planning, such as revocable and irrevocable trusts, and many documents that accompany such estate planning techniques. The paralegal student will also learn the various mechanisms for transferring property upon debt with and without probate administration. Further, the paralegal student will learn about the areas of guardianship and conservatorship. All of the learning in this class will be relative to California law. Field trips may be required.

Transfer credit: CSU.
### PLS R127  Trusts and Estates 3 Units

**Hours:** 3.0 lecture  
**Prerequisite:** None  

This course will explore a general overview of estate planning and administration, the sources of property, the laws of succession, the legal theory and practice of trusts and wills, estate administration, taxation of estates and trusts, and the comparison of the law of trusts and estates in different jurisdictions. The student will be exposed to very practical aspects of the law office practice relating to trusts, estates, and related areas. Field trips may be required.  
*Transfer credit: CSU.*

### THTR R198  Short Courses in Theatre 0.5-3 Units

**Hours:** Lecture and/or lab hours as required by unit formula  
**Prerequisite:** THTR R191  

The short courses umbrella permits development of temporary-use (up to twice) courses for short-term need or for field-testing permanent courses. Field trips may be required.  
*Transfer credit: CSU.*

### URBS R101  Introduction to Urban Studies 3 Units

**Hours:** 3.0 lecture  
**Advisory:** None  

What is a city, how did the city develop, and what will the cities of the future look like? This course serves as an introduction to the multi-disciplinary field of urban studies. Utilizing an interdisciplinary approach incorporating anthropology, geography, history, political science and sociology, we examine the space of the city. We consider the city’s origins, complexity, richness, challenges, social problems, and its physical, social and cultural characteristics. We explore the appeal of the city as a social and political space, and we also think about the cities of the future and what they mean for human culture and society. Field trips may be required.  
*Transfer credit: CSU.*
ANTH R114  African American **Culture and Experience** Ethnology  3 Units  
Hours:  3.0 lecture  
Prerequisites:  None  

This course explores the richness and diversity of African American culture and experience in the Americas from the 1600’s to the present. Utilizing an anthropological perspective we will critically explore concepts like race, identity, diaspora, discrimination, marginalization and hybridity while paying particular attention to the significant impact that African Americans have had on American culture as a whole. Topics for discussion will include the influences of Yoruba culture, slavery, the Harlem Renaissance, Pan-Africanism, civil rights, the Black Power movement, the Black Panthers, blues, jazz, poetry, sports, literature, and the culture of Hip Hop. An anthropological exploration of the ethnohistorical development of African lifestyles in the New World. Special emphasis will be on the African-American in the U.S. Fieldwork in the local community will be part of the course. (Same as AFAM R101) Field trips may be required.  
*Transfer credit: CSU.*

<table>
<thead>
<tr>
<th>ART R115A</th>
<th>Abstract Concepts I</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>1.5 lecture, 4.5 lab</td>
<td></td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>ART R110A, ART R110B, ART R112B, ART R126B, or equivalent</td>
<td></td>
</tr>
</tbody>
</table>

This course is a study of abstract conceptual trends, both past and present source development in all art. Students will explore the areas of abstraction in real and non-objective form, as well as problems and solutions in abstraction. Field trips may be required. Course is offered Pass/No Pass at student’s option.  
*Transfer credit: UC, CSU.*

<table>
<thead>
<tr>
<th>ASL R101</th>
<th>American Sign Language 1</th>
<th>3 Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours:</td>
<td>4.0 lecture</td>
<td></td>
</tr>
<tr>
<td>Prerequisite:</td>
<td>None</td>
<td></td>
</tr>
</tbody>
</table>

Students with little or no prior knowledge of American Sign Language will be introduced to the natural language and culture of the American Deaf community. The course provides basic vocabulary and preparation for visual/gestural communication. Emphasis will be on comprehension skills and the fundamentals of ASL grammatical structures. Field trips may be required. Course is offered Pass/No Pass (P/NP) at student’s option.  
*Transfer credit: UC, CSU.*
ASL R102  American Sign Language 2  4 Units
Hours:  4.0 3.0 lecture
Prerequisite:  ASL R101

Building on the skills developed in the ASL R101 course, instruction will focus on ASL sentence types, time concepts, numbers, classifiers, giving directions, describing others, making requests, and discussing family and occupations. Additional information on Deaf culture and community will be presented. Field trips may be required. **Course is offered Pass/No Pass (P/NP) at student’s option.**

*Transfer credit: UC, CSU.*

BIOL R120  Principles of Biology I  4 Units
Hours:  4.0 lecture
Prerequisite:  ENGL R096 or ENGL R100; CHEM R120 and MATH R104
Advisory:  ENGL R101

The first semester of biology for majors introduces the student to principles of cellular and molecular biology. Knowledge from a breadth of disciplines related to health, medical and research science careers is examined including: biochemistry, metabolism, molecular biology, genetics, cellular biology, recombinant DNA, developmental biology, microbiology and molecular evolution. While the diversity of life is surveyed, an emphasis is placed on the biology worldview derived from experimental data of specific model genera, animal cell culture systems and prokaryotic/eukaryotic viruses. The method of generating hypothesis based research results and the role of paradigms in advancing biological science theory are examined. This course is applied towards fulfilling University biology prerequisites and the Community College Biotechnology Certificate. Field trips may be required.

*Transfer credit: UC, CSU.*
FT R170  Firefighter I Academy  18 Units
Hours:  10.0 lecture; 24.0 lab
Prerequisites:  EMT R169 and FT R151
Advisories:  FT R152, FT R154, FT R161, and FT R167

The Oxnard College Regional Fire Academy (OCRFA) provides the skills and knowledge needed for the entry level firefighter, career or volunteer, to perform duties safely, effectively, and competently. The seven overarching themes of the California State Fire Fighter I curriculum are: General knowledge germane to the profession, fire department communications, fireground operations, rescue operations, preparedness and maintenance, wildland suppression activities, and hazardous materials/WMD. This class provides information about fire service employment opportunities. The following topics are also covered: Technical and manipulative training in basic concepts of fire department apparatus, tools and equipment; tactics and strategy; extinguishers and fire protection equipment; hazardous materials; petroleum fire control; fire service ladders and ladder evolutions; structural ventilation and salvage operations; wildland fire control; inspection and maintenance of fire department stations and equipment; fire characteristics; apparatus and equipment inspection; Self Contained Breathing Apparatus; communications systems; and ropes, knots and hitches. All exams require an 80% passing grade for all academic and manipulative tests per State Fire Marshal requirements. Students are expected to obtain all purchase required uniforms and safety equipment, and state certifications. State certification costs are the responsibility of the student. Field trips may be required.

Transfer credit: CSU.

MICR R100  Principles of Microbiology  3 Units
Hours:  3.0 lecture
Prerequisite:  BIOL R120 and BIOL R120L; or both ANAT R101 and PHSO R101; and BIOL R100, BIOL R100L, CHEM R104, ENGL R096, and MATH R014

This course is an introduction to the structure, metabolic activities, utility and pathogenicity of bacteria, fungi, algae, protozoa and viruses. The topics will include distribution, metabolism, molecular genetics, biotechnology, immunity, cancer, probiotics and the physical/chemical methods used in control of microbes and cellular pathogens. The principles of disease transmission, prevention and immunity will also be presented. The diversity of the microbial world and its applications to improving human health and quality of life are emphasized. Field trips may be required. Course is offered Pass/No Pass (P/NP) at student’s option.

Transfer credit: UC, CSU.
### Proficiency Award in Airside Systems

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVT R030 Airside Systems</td>
<td>3</td>
</tr>
<tr>
<td>ENVT R030L Airside Systems Lab</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Required Units: 5

### Proficiency Award in Auto Body/Collision Repair

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB R001 Introduction to Automotive – Body and Fender</td>
<td>4</td>
</tr>
<tr>
<td>AB R002 Intermediate Auto Body and Fender Repair</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Required Units: 8

### Proficiency Award in Auto Body Painting and Refinishing

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB R005A Auto Body Painting &amp; Refinishing I</td>
<td>2</td>
</tr>
<tr>
<td>AB R005B Auto Body Painting and Refinishing II</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Required Units: 6

### Proficiency Award in Automotive Graphics

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AB R007A Automotive Graphics</td>
<td>2</td>
</tr>
<tr>
<td>AB R007B Advanced Automotive Graphics</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Required Units: 4
Proficiency Award in Electrical Systems for HVAC/R

Required Courses:    Units
ENVT R020  Electrical Systems I       3
ENVT R020L  Electrical Systems I Lab      2
ENVT R021L  Electrical Systems II Lab      2

Total Required Units          7

Proficiency Award in Energy Auditing

Required Courses:    Units
ENVT R050  Energy Auditing       3
ENVT R050L  Energy Auditing Lab       2

Total Required Units          5

Proficiency Award in Estimating Auto Body Damage & Advanced Repair

Required Courses:    Units
AB R003  Introduction to Estimating Auto Body Damage   4
AB R004  Advanced Auto Body Collision and Damage Repair    4

Total Required Units          8

Proficiency Award in Heating and Hydronics

Required Courses:    Units
ENVT R040  Heating and Control Systems       3
ENVT R040L  Heating and Control Systems Lab     2

Total Required Units          5
## Proficiency Award in Lead Cook

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CRM R102A Quantity Food Preparation</td>
<td>7</td>
</tr>
<tr>
<td>CRM R104 Sanitation &amp; Environmental Control</td>
<td>3</td>
</tr>
</tbody>
</table>

Total Required Units: 10

## Proficiency Award in Mechanical Systems for HVAC/R

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVT R010 Introduction to Air Conditioning &amp; Refrigeration</td>
<td>3</td>
</tr>
<tr>
<td>ENVT R010L Introduction to Air Conditioning &amp; Refrigeration I Lab</td>
<td>2</td>
</tr>
<tr>
<td>ENVT R011L Air Conditioning and Refrigeration II Lab</td>
<td>2</td>
</tr>
</tbody>
</table>

Total Required Units: 7

## Proficiency Award in Wireless Networking

<table>
<thead>
<tr>
<th>Required Courses</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNIT R127 Wireless Networking Fundamentals and CNIT R120 Cisco CCNA Computer Networking I</td>
<td>3</td>
</tr>
<tr>
<td>or CNIT R144 CompTIA Network+ Fundamentals and Certification Prep</td>
<td>4</td>
</tr>
</tbody>
</table>

Total Required Units: 7
VENTURA COLLEGE

New Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>AUTO V11</td>
<td>Vehicle Maintenance for the Technician</td>
<td>2</td>
</tr>
<tr>
<td>AUTO V12</td>
<td>Introduction to the Automotive Industry</td>
<td>1</td>
</tr>
<tr>
<td>AUTO V30</td>
<td>Automatic Transmission Diagnosis and Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO V30L</td>
<td>Automatic Transmission Diagnosis and Repair Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>AUTO V33</td>
<td>Manual Transmissions and Driveline</td>
<td>2</td>
</tr>
<tr>
<td>AUTO V33L</td>
<td>Manual Transmissions and Driveline Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>AUTO V34</td>
<td>Engine Repair</td>
<td>2</td>
</tr>
<tr>
<td>AUTO V34L</td>
<td>Engine Repair Laboratory</td>
<td>2</td>
</tr>
<tr>
<td>AUTO V38</td>
<td>Heating and Air Conditioning</td>
<td>2</td>
</tr>
<tr>
<td>AUTO V38L</td>
<td>Heating and Air Conditioning Laboratory</td>
<td>1</td>
</tr>
<tr>
<td>AUTO V42</td>
<td>Automotive Engine Management</td>
<td>4</td>
</tr>
<tr>
<td>AUTO V43</td>
<td>Automotive Electronics</td>
<td>2</td>
</tr>
<tr>
<td>AUTO V43L</td>
<td>Automotive Electronics Laboratory</td>
<td>1.5</td>
</tr>
<tr>
<td>CD V10</td>
<td>Introduction to Children with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>CD V20</td>
<td>Curriculum and Strategies for Children with Special Needs</td>
<td>3</td>
</tr>
<tr>
<td>CD V23</td>
<td>Creative Experiences, Materials, and Environments in ECE</td>
<td>3</td>
</tr>
<tr>
<td>CD V27</td>
<td>Infant and Toddler Development</td>
<td>3</td>
</tr>
<tr>
<td>COUN V01</td>
<td>College Success</td>
<td>3</td>
</tr>
<tr>
<td>COUN V02</td>
<td>Career Exploration and Life Planning</td>
<td>3</td>
</tr>
</tbody>
</table>

Revised Courses

<table>
<thead>
<tr>
<th>Course Code</th>
<th>Course Title</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>BUS V95</td>
<td>Business Internship I</td>
<td>1-4</td>
</tr>
<tr>
<td>PHYS V02A</td>
<td>General Physics I: Algebra/Trigonometry-Based</td>
<td>4</td>
</tr>
<tr>
<td>PHYS V02AL</td>
<td>General Physics I Laboratory: Algebra/Trigonometry-Based</td>
<td>1</td>
</tr>
<tr>
<td>PHYS V02B</td>
<td>General Physics II: Algebra/Trigonometry-Based</td>
<td>4</td>
</tr>
<tr>
<td>PHYS V02BL</td>
<td>General Physics II Laboratory: Algebra/Trigonometry-Based</td>
<td>1</td>
</tr>
<tr>
<td>PHYS V04</td>
<td>Mechanics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS V04L</td>
<td>Mechanics Laboratory for Scientists and Engineers</td>
<td>1</td>
</tr>
<tr>
<td>PHYS V05</td>
<td>Electricity and Magnetism for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS V05L</td>
<td>Electricity and Magnetism Laboratory for Scientists and Engineers</td>
<td>1</td>
</tr>
<tr>
<td>PHYS V06</td>
<td>Optics, Heat, and Modern Physics for Scientists and Engineers</td>
<td>4</td>
</tr>
<tr>
<td>PHYS V06L</td>
<td>Optics, Heat, and Modern Physics Laboratory for Scientists and Engineers</td>
<td>1</td>
</tr>
</tbody>
</table>
New Courses

AUTO V11  Vehicle Maintenance for the Technician  2 Units
Hours:  1 lecture, 3 laboratory weekly

This course will help the student develop the skills needed for an entry level position as an automotive lubrication service technician.
Field trips may be required.

AUTO V12  Introduction to the Automotive Industry  1 Unit
Hours:  1 lecture weekly

This course will help the student understand the opportunities in the automotive industry. The student will prepare the documents needed to apply for a position in the automotive industry and learn how to get that first job.
Field trips may be required.

AUTO V30  Automatic Transmission Diagnosis and Repair  2 Units
Corequisite:  AUTO V30L
Hours:  2 lecture weekly

This course will prepare an automotive student in the theory and skills necessary to diagnose, adjust, maintain, and repair automatic transmissions. Preparation for the Automotive Service Excellence (ASE) test in automotive transmissions will be included.
Field trips may be required.

AUTO V30L  Automatic Transmission Diagnosis and Repair  2 Units
Laboratory
Corequisite:  AUTO V30
Hours:  6 laboratory weekly

This course will provide hands-on vocational preparation in the diagnosis, adjustment, maintenance, and repair of automatic transmissions, including torque converters, gear trains, and hydraulic and electronic systems. Preparation for the Automotive Service Excellence (ASE) test in automotive transmissions will be included.
Field trips may be required.

AUTO V33  Manual Transmissions and Driveline  2 Units
Corequisite:  AUTO V33L
Hours:  2 lecture weekly

This course is designed to prepare an automotive student in the theory and skills necessary to diagnose, adjust, maintain, and repair automotive manual transmissions, manual transaxles, 4-wheel drive systems, and differentials. This course will provide preparation for certification tests in manual transmissions and driveline.
Field trips may be required.
New Courses, continued

AUTO V33L Manual Transmissions and Driveline Laboratory 1 Unit
Corequisite: AUTO V33
Hours: 3 laboratory weekly

This course will provide vocational preparation in the service and repair of manual transmissions, transaxles, and differentials. Diagnosis, service, and repair of the clutch, manual transmission, 4-wheel drive system, and differential systems will be pursued. Preparation for the Automotive Service Excellence (ASE) test in manual transmission and differentials will be included.

*Field trips may be required.*

AUTO V34 Engine Repair 2 Units
Corequisite: AUTO V34L
Hours: 2 lecture weekly

This course is designed to prepare an automotive student in the theory and skills necessary to diagnose, adjust, maintain, and repair automotive engines. This course will provide preparation for certification tests in engine repair.

*Field trips may be required.*

AUTO V34L Engine Repair Laboratory 2 Units
Corequisite: AUTO V34
Hours: 6 laboratory weekly

This course is designed to prepare an automotive student in the skills necessary to diagnose, adjust, maintain and repair automotive engines. This course will provide preparation for certification tests in engine repair.

*Field trips may be required.*

AUTO V38 Heating and Air Conditioning 2 Units
Corequisite: AUTO V38L
Hours: 2 lecture weekly

This course will provide vocational preparation in the theoretical background required to diagnose, adjust, test, and repair automotive heating/air conditioning and cooling systems. This course will also provide preparation for certification tests in heating/air conditioning.

*Field trips may be required.*
New Courses, continued

AUTO V38L  Heating and Air Conditioning Laboratory  1 Unit
Corequisite:  AUTO V38
Hours:  3 laboratory weekly

This course will provide vocational preparation in the practical skills required to diagnose, adjust, test, and repair automotive heating/air conditioning and cooling systems. This course will also provide preparation for certification tests in heating/air conditioning.

Field trips may be required.

AUTO V42  Automotive Engine Management  4 Units
Recommended Preparation:  AUTO V10
Hours:  2 lecture, 6 laboratory weekly

This course provides technical preparation in the skills required to diagnose engine control management systems. Inputs and outputs to the engine control computer will be covered, as well as how other computer control systems interact through networks such as CAN (Controller Area Network). Students will use manufacturer approved scan tools, lab scopes, digital voltmeters, and other state-of-the-art test equipment. Hybrid vehicle controls will be covered. Preparation for the ASE certification in engine performance will also be included.

Field trips may be required.

AUTO V43  Automotive Electronics  2 Units
Recommended Preparation:  AUTO V27
Corequisite:  AUTO V43L
Hours:  2 lecture weekly

This course covers technical, operational, and diagnostic skills for various types of automotive electronic systems, computer communication systems, and high voltage electrical systems. Preparation for the ASE electrical (A6) exam is included.

Field trips may be required.

AUTO V43L  Automotive Electronics Laboratory  1.5 Units
Corequisite:  AUTO V43
Hours:  4.5 laboratory weekly

This lab course covers technical and diagnostic skills for automotive electronic systems. It complements the lecture course AUTO V43.

Field trips may be required.
New Courses, continued

CD V10  Introduction to Children with Special Needs  3 Units
Recommended Preparation: CD V02 and CD V62
Hours: 3 lecture weekly

This course introduces the variations in development of children with special needs ages birth through eight, and the resulting impact on families. It includes an overview of historical and societal influences, laws relating to children with special needs, and the identification and referral process.

*Field trips may be required. Transfer credit: CSU.*

CD V20  Curriculum and Strategies for Children with Special Needs  3 Units
Hours: 3 lecture weekly

This course covers curriculum and intervention strategies for working with children with special needs in partnership with their families. It focuses on the use of observation and assessment in meeting the individual needs of children in inclusive and natural environments. Included is the role of the teacher as a professional working with families, collaboration with interdisciplinary teams, and cultural competence.

*Transfer credit: CSU.*

CD V23  Creative Experiences, Materials, and Environments in ECE  3 Units
Hours: 3 lecture weekly

This is a study of how to find, select, and develop age-appropriate experiences for young children in the domains of visual and performing arts, language and literacy, science, math, and social studies. Students will examine curriculum ideas and the materials, environments, and teaching strategies needed to create experiences which will promote the learning and development of all young children. Emphasis is on application of developmental theory, curriculum design, and resources.

*Field trips may be required. Transfer credit: CSU.*

CD V27  Infant and Toddler Development  3 Units
Hours: 3 lecture weekly

This course is a study of infants and toddlers from pre-conception to age three, including physical, cognitive, language, social, and emotional growth and development. It applies theoretical frameworks to interpret behavior and interactions between heredity and environment. It emphasizes the role of family and relationships in development.

*Field trips will be required. Transfer credit: CSU.*
New Courses, continued

COUN V01  
College Success  
3 Units  
Hours:  
3 lecture weekly

This course provides an exploration of cognitive, psychological, social, and physical factors influencing success in college and in life. This will be accomplished by emphasizing three areas: (1) academic skills; (2) behavioral principals; and (3) relational skills.  
_Transfer credit: CSU; UC._

COUN V02  
Career Exploration and Life Planning  
3 Units  
Hours:  
3 lecture weekly

This course will examine student, career and self-development theories to assist students to make effective decisions throughout their lifespan. This course is designed for students wanting to engage in the process of career and life planning from a psychological, sociological and physiological perspective. Students will compare and contrast human development and career theories, decision-making, factors that contribute to college success, life skills, adult workplace competencies, values, interest, abilities, and personality, labor market trends in a global economy, and successful job search and workplace behaviors.  
_Transfer credit: CSU; UC._

Revised Courses

BUS V95  
Business Internship I  
1-4 Units

Recommended Preparation:  
(lenient) completion of or concurrent enrollment in one course in the discipline at least 9 units towards a specific business department Certificate of Achievement or AA/AS degree

Prerequisite:  
Successful completion of or concurrent enrollment in one course in the discipline

Corequisite:  
Enrolled in a minimum of 6 units to include internship

Enrollment Limitation:  
Approval of the department chair

Hours:  
60 per unit

This course offers students who are volunteers (unpaid) an opportunity to obtain work experience related to their field of study. Students are accepted as a result of consultation with a designated faculty member in the discipline and the acceptance of an approved work proposal.  
Formerly Bus 95. Offered on a pass/no pass basis only. Transfer credit: CSU; credit limitations – see counselor.
Revised Courses, continued

PHYS V02A

General Physics I: Algebra/Trigonometry-Based
4 Units

C-ID: Aligned with PHYS 105 and/or PHYS 100S

Prerequisite: MATH V05 with a grade of C or better; or the fourth year of high school mathematics (advanced mathematics) with a grade of C or better.

Corequisite: PHYS V02A

Recommended Preparation: MATH V20 and PHSC V01 or PHYS V01 or high school physics

Hours: 4 lecture weekly

This course includes demonstration lectures, daily assignment of problems in the areas of mechanics and properties of matter, wave motion and sound, fluids, and heat is the first semester of a two-semester algebra/trigonometry based-sequence. It is intended for students needing a one-year course in general physics as a requirement for their major program (Not for students majoring in physics, engineering, or mathematics). Core topics include: kinematics, dynamics, work and energy, momentum, fluids, simple harmonic motion, waves, heat, and temperature.

Formerly Phys 2A. Transfer credit: CSU; UC; credit limitations - see counselor.

PHYS V02AL

General Physics I Laboratory: Algebra/Trigonometry-Based
1 Unit

C-ID: Aligned with PHYS 105 and/or PHYS 100S

Corequisite: PHYS V02A

Hours: 3 laboratory weekly

This is a laboratory course in mechanics, wave motion, properties of matter, heat and temperature. Students will be introduced to state-of-the-art computer-based data gathering and processing techniques including spreadsheet analysis. The first semester laboratory course of a two-semester algebra/trigonometry based-sequence. It is intended for students needing a one-year course in general physics as a requirement for their major program (Not for students majoring in physical sciences, engineering, or mathematics). Core topics include: kinematics, dynamics, work and energy, momentum, fluids, simple harmonic motion, waves, heat, and temperature.

Formerly Phys 2AL. Transfer credit: CSU; UC; credit limitations - see counselor.
Revised Courses, continued

PHYS V02B  General Physics II: *Algebra/Trigonometry-Based*  4 Units
*C-ID:*  *Aligned with PHYS 110 and/or PHYS 100S*
Prerequisite:  PHYS V02A with grade of C or better and PHYS V02AL with grade of C or better
Corequisite:  PHYS V02BL
Hours:  4 lecture weekly

This course includes demonstration lectures and daily assignment of problems in the areas of electricity and magnetism, light, and is the second semester of a two-semester algebra/trigonometry based-sequence. It is intended for students needing a one-year course in general physics as a requirement for their major program (Not for students majoring in physical sciences, engineering, or mathematics). Core topics include: electricity, magnetism, optics, atomic and nuclear physics, and modern physics.
*Formerly Phys 2B. Transfer credit: CSU; UC; credit limitations - see counselor.*

PHYS V02BL  General Physics II Laboratory:  1 Unit
*C-ID:*  *Aligned with PHYS 110 and/or PHYS 100S*
Corequisite:  PHYS V02B
Hours:  3 laboratory weekly

This is a laboratory course in the second semester laboratory course of a two-semester algebra/trigonometry based-sequence. It is intended for students needing a one-year course in general physics as a requirement for their major program (Not for students majoring in physical sciences, engineering, or mathematics). Core topics include: electricity, magnetism, optics, atomic and nuclear physics, and modern physics.
*Formerly Phys 2B. Transfer credit: CSU; UC; credit limitations - see counselor.*

PHYS V04  Mechanics for Scientists and Engineers  4 Units
*C-ID:*  *Aligned with PHYS 205 and/or PHYS 200S*
Prerequisite:  PHYS V01 or high school physics with grade of C or better and MATH V21A with grade of C or better
Corequisite:  PHYS V04L
Recommended Preparation:  Concurrent enrollment in MATH V21B
Hours:  4 lecture weekly

This course includes demonstration lectures and problems in the fundamentals of mechanics and properties of matter, with problems in forces, motion and energy. is the first semester of a three-semester calculus-based sequence intended for students majoring in physical sciences, engineering, and mathematics. Core topics include an introduction to kinematics, dynamics, work and energy, momentum, rotation, gravitation, simple harmonic motion, and the statics and dynamics of ideal fluids.
*Field trips may be required. Formerly Phys 4. Transfer credit: CSU; UC; credit limitations - see counselor.*

DTRW-I Meeting – 12/11/14
Revised Courses, continued

PHYS V04L  Mechanics Laboratory for Scientists and Engineers  1 Unit

C-ID:     Aligned with PHYS 205 and/or PHYS 200S
Corequisite: PHYS V04
Hours:  3 laboratory weekly

This is the first laboratory course in a three-semester-based course of laboratory experiments in mechanics. Computers are interfaced with equipment for rapid data gathering and processing. Spreadsheets are used for data analysis. This semester calculus-based sequence intended for students majoring in physical sciences, engineering, and mathematics. Core topics include experiments in kinematics, dynamics, work and energy, momentum, rotation, gravitation, and simple harmonic motion.
Formerly Phys 4L. Transfer credit: CSU; UC; credit limitations - see counselor.

PHYS V05  Electricity and Magnetism for Scientists and Engineers  4 Units

C-ID:     Aligned with PHYS 210 and/or PHYS 200S
Prerequisite: MATH V21B with grade of C or better and PHYS V04 with grade of C or better
Corequisite: PHYS V05L
Recommended Preparation: Concurrent enrollment in MATH V21C
Hours:  4 lecture weekly

In this course there will be demonstration lectures and problems in the fundamentals of electricity, including fields, circuits, magnetism and This course is the second semester of a three-semester calculus-based sequence intended for students majoring in physical sciences, engineering, and mathematics. Core topics include electrostatics, magnetism, DC and AC circuits, Maxwell's equations and electromagnetic waves.
Field trips may be required. Formerly Phys 5. Transfer credit: CSU; UC; credit limitations - see counselor.

PHYS V05L  Electricity and Magnetism Laboratory for Scientists and Engineers  1 Unit

C-ID:     Aligned with PHYS 210 and/or PHYS 200S
Corequisite: PHYS V05
Hours:  3 laboratory weekly

This course includes laboratory investigations in electricity, analog and digital circuits, and magnetism. It also includes computer based simulations and spreadsheet analyses. This is the second semester laboratory portion of a three-semester calculus-based sequence intended for students majoring in physical sciences, engineering, and mathematics. Core activities include investigations in electric and magnetic fields, electronic components, DC and AC circuits, and electrical signal measurements.
Formerly Phys 5L. Transfer credit: CSU; UC; credit limitations - see counselor.

DTRW-I Meeting – 12/11/14
Revised Courses, continued

PHYS V06
Optics, Heat, and Modern Physics for Scientists and Engineers

C-ID: Aligned with PHYS 215 and/or PHYS 200S

Prerequisite: PHYS V04 with grade of C or better and PHYS V04L with grade of C or better; and MATH V21C with grade of C or better or concurrent enrollment

Corequisite: PHYS V06L

Recommended Preparation: PHYS V05 and PHYS V05L

Hours: 4 lecture weekly

This course includes demonstration lectures and problems in the fundamentals of physics. It is the third semester of a three-semester calculus-based sequence intended for students majoring in physical sciences, engineering, and mathematics. Core topics include optics, heat, atomic and nuclear physics, special relativity and quantum mechanics, with problems in flow and wave phenomena modern physics.

Formerly Phys 6. Transfer credit: CSU; UC; credit limitations - see counselor.

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PHYS V06L
Optics, Heat, and Modern Physics Laboratory for Scientists and Engineers

C-ID: Aligned with PHYS 215 and/or PHYS 200S

Corequisite: PHYS V06

Hours: 3 laboratory weekly

This course includes laboratory experiments in laser. It is the third semester laboratory portion of a three-semester calculus-based sequence intended for students majoring in physical sciences, engineering, and mathematics. Core topics include optics, heat, spectroscopy, atomic and nuclear modern physics.

Formerly Phys 6L. Transfer credit: CSU; UC; credit limitations - see counselor.
The Chancellor, in consultation with the Academic Senates, shall establish procedures that assure appropriate articulation of the District's educational programs with proximate high schools and baccalaureate institutions. The procedures also may support articulation with institutions, including other community colleges and those that are not geographically proximate but that are appropriate and advantageous for partnership with the District.

See Administrative Procedure 4050.
Articulation between VCCCD and Baccalaureate Institutions

The responsibility for the development, maintenance, and distribution of articulation agreements between VCCCD (Ventura College Community College District) and in-state community colleges and baccalaureate institutions is assigned to the individual Articulation Officers at each college in the District.

The Articulation review processes are defined for:

1. the Colleges of VCCCD
2. maintenance of existing articulation agreements of public and private in-state community colleges and/or
2.3. public four-year institutions - California State University (CSU) and University of California (UC); and
3.4. private, independent, proprietary or out-of-state institutions.

The Colleges of VCCCD

The Articulation Officer:

Annually reviews the type(s) of articulation agreement sought and updates the following articulation:

- Transfer
- General education/breadth requirements
- Major preparation
- Courses by department
- Course-to-course
- Other, such as admission or graduation by subject matter

Coordinates with the other institution to exchange needed documentation, such as catalog or course outlines.

Coordinates with on-campus department(s) to ensure accuracy of the proposed courses to be included in an agreement.

Completes agreement.
Once approved by both institutions, the Articulation Officer ensures that information is appropriately publicized and updated through publications such as Articulation System Stimulating Inter-Institutional Student Transfer (ASSIST), the college catalog, and the schedule of classes. The new articulation agreement will be publicized to faculty and students, in particular, the disciplines most directly affected by the agreement.

- **VCCCD Comparable Course List with C-ID (Course Identification Number System)**
- **VCCCD General Education (GE) Placement List**
- **VCCCD Approved Course Identification Number System (C-ID) Course List**

**Maintenance of existing articulation agreements of in-state community colleges and/or public four-year institutions**

The Articulation Officer reviews and updates the following:

- **University of California Transfer Course Agreement (UC TCA)**
- **California State University (CSU) Baccalaureate Level Course List**
- **Intersegmental Segmental General Education Transfer Curriculum (IGETC)**
- **CSU General Education/Breadth (CSU GE-Breadth) requirements**
- **CSU United States History, Constitution, and American Ideals Courses**
- **Course Identification Numbering System (C-ID)**
- **Articulation Agreements by Major (major prep)**
- **Articulation Agreements by Courses by Department (course-to-course)**
- **Other agreements, such as admission or graduation requirements by subject matter**

**The Process includes:**

- **Coordinating with the other institution to exchange needed documentation, such as catalog and/or course outlines. and/or When syllabi are required, the Articulation Officer will request them from the respective division/department.**
- **Coordinating with on-campus department(s) to ensure accuracy of the proposed courses to be included in an agreement.**
- **Completing the agreement.**
- **Once completed, Publicize the agreement.**

  - The Articulation Officer ensures that information is appropriately publicized and updated through publications such as Articulation System Stimulating Inter-Institutional Student Transfer (ASSIST), the college catalog, and the schedule of classes, and College website. The new articulation agreement will be publicized to faculty and students, in particular, the disciplines most directly affected by the agreement.

**Private, independent, proprietary or out-of-state institution**

Articulation agreement requests by other popular transfer destination campuses will be considered on case-by-case basis. Articulation priority will be given to VCCCD, CCCIn-state community colleges, CSU and UC campuses and to state-mandated programs and projects (i.e., C-ID).

2.27.14 DTRW-I review – version from AOs received 2.24.14
Cabinet review 4.14.14; 9.20.14
Articulation Officer reviews the type(s) of articulation agreement sought (see list in previous section).

The Articulation Officer:

- Researches the institution’s background, including the type and status of its accreditation, its educational philosophy, and the pros and cons of an articulation agreement.
- Meets with his or her counterparts at the District Colleges to review the research and seek unanimity for or against creating articulation with the subject institution.
- Reviews this research with the appropriate College Dean and EVP prior to the development of a potential agreement.

In the event of a lack of district-wide consensus on a proposal, the EVP refers that proposal to the College President, who will collaborate to make the final determination.

If the elements of a potential agreement do not align with the college mission, or appear not to serve the interest of students, the process is halted without further work.

If consensus is reached district-wide with the Articulation Officers, and if the College Dean and EVP have reviewed and approved the proposed agreement, the proposed agreement is forwarded to DCSL (District Council for Student Learning) for review.

Upon review and recommendation by DCSL, the proposed agreement is reviewed at Chancellor’s Cabinet prior to final signing by the Articulation Officer.

**New Articulation Agreements**

The Articulation Officer:

- Researches the institution’s background, including the type and status of its accreditation (VCCCD will only accept proposals from Regionally Accredited Institutions), its educational philosophy, and the pros and cons of an articulation agreement.
- Meets with his or her counterparts at the District Articulation Officers Colleges to review the research and seek unanimity-consensus for or against creating an articulation agreement with the subject institution.
- Reviews this research with the appropriate College Dean and/or EVP prior to the development of a potential agreement.

In the event of a lack of district-wide consensus on a proposal, the EVP refers that proposal to the College President, who will collaborate to make the final determination.

If the elements of a potential agreement do not align with the college mission, or appear not to serve the interest of students, the process will be halted without further work.

If consensus is reached district-wide with the Articulation Officers, and if the College Dean and EVP have reviewed and approved the proposed agreement, the proposed agreement is forwarded to DCSL DTRW-I (District Technical Review Workgroup-Instructional Council for Student Learning) for review.

2.27.14 DTRW-I review – version from AOs received 2.24.14
Cabinet review 4.14.14; 9.20.14
Upon review and recommendation by DCSL: DTRW-I, the proposed agreement is reviewed at Chancellor’s Cabinet prior to final signing by the Articulation Officer.

**Maintenance of Existing Articulation Agreements**

The Articulation Officer:

- Reviews and updates articulation agreements as requested and provided by the Outside Institutions and follows the same process as the In-State Community College or Four-year Institutions as outlined above.

**Articulation between VCCCD and High School Institutions**

The responsibility for the development of new, maintenance and high schools to and colleges articulation agreements, maintenance and distribution of existing articulation agreements distribution of articulation agreements between VCCCD and the high schools is assigned to the individual Career Educational Specialist, to the appropriate individual, a dean or designee at each college in the District and is defined in AP 4051.

**New Articulation Agreements**

The Career Education Specialist:

- Coordinates the process of course reviews between the participating high school and the college.
- The high school and college discipline faculty are responsible for the curriculum review for comparability of courses, and
- The College discipline faculty will determine how courses and unit credits will be awarded for college credit.
- Maintenance of Existing Articulation Agreements

The Career Education Specialist:

Reviews and updates of the high school articulation agreements are conducted when there are changes to the curriculum and on as-needed-basis.
The occupational/vocational technical programs of the District shall be of high quality, relevant to community and student needs, and evaluated regularly to ensure quality and currency. To that end, the Chancellor, in consultation with the Academic Senates, shall establish procedures for the development and review of all occupational/vocational technical programs, including their establishment, modification or discontinuance.

See Administrative Procedure 4102.
Career Technical Education (CTE) Program Development and Approval

This procedure applies only to programs with a Taxonomy of Programs (TOP) code that designates it as vocational or career technical in nature. All CTE program development must also process follows the steps outlined in AP 4020 Program, Curriculum and Course Development. However, in addition, new CTE program development must also include the following:

1. South Coast Regional Consortium Submission SCRC:
   - After local Board of Trustees approval, the proposed CTE program must be submitted to the South Coast Regional Consortium (SCRC) for review and support approval, where applicable. SCRC review is required prior to CCCCO submission. While SCRC approval is not required for CCCCO submission, it is recommended; it is highly unlikely that CCCCO approval will be given without SCRC consent. Per the Program and Course Approval Handbook, 5th Edition, Regional Consortium approval is required.

2. Narrative Criteria A-E Items and Additional Supporting Documentation as guided by the most recent Program and Course Approval Handbook (per Program and Course Approval Handbook, 5th Edition) Form CCC-501: Completion of CTE elements in Form CCC-501 Application of Approval -- New Credit Program, including, but not limited to:
   - Labor market information and analysis
   - Employer survey
   - Justification of the new career technical education program through job market study
   - Explanation of Employer Relationship
   - Membership roster and minutes from most recent advisory committee meeting

3. Advisory Committee
   - Members of the advisory committee shall be employees selected from business or industry related to the program, high school/university representatives, students or alumni of the program, or other interested individuals with expertise in the area, or agency representatives. A balance should exist of faculty and staff representatives of the college discipline to the business/industry representatives. College representatives should be no more than 20% of the committee membership.

4. CTE Program Review
   - CTE program review is required every two years (Ed Code §78016), in accordance to established program review practices at each District College. In addition to the established program review elements, the review process must include at a minimum, but is not limited, to the following:

DTRW-I review 3.07.13
DTRW-I review 4.11.13
DTRW-I review 9.26.13 (changes from Carmen Guerrero)
DTRW-I review 10.09.14
• Current viability of the CTE program
• Continuing market relevance of CTE
• Demonstration of student completion
• Demonstration of student success in state or regional licensure, or comparable examinations
• **Continuing review by Advisory Committee identifying skills and competencies needed in the local workforce.**
• **Demonstration of student success in obtaining employment**