SAN BERNARDINO COMMUNITY COLLEGE DISTRICT

TO: Board of Trustees

FROM: Bruce Baron, Chancellor

REVIEWED BY: Dr. Gloria Fisher, President, SBVC

PREPARED BY: Dr. Haragewen Kinde, Vice President, Instruction, SBVC

DATE: February 25, 2016

SUBJECT: Consideration of Approval of Curriculum - SBVC

RECOMMENDATION

It is recommended that the Board of Trustees approve the SBVC curriculum modifications.

OVERVIEW

The courses, certificates, and degrees at SBVC are continually being revised and updated to reflect and meet student needs.

ANALYSIS

These courses, certificates, and degrees have been approved for addition, modification, and deletion by the Curriculum Committee of the Academic Senate and will be included in the 2016-2017 College Catalog.

BOARD IMPERATIVE

II. Learning Centered Institution for Student Access, Retention, and Success.

FINANCIAL IMPLICATIONS

None.

SAN BERNARDINO VALLEY COLLEGE SUBMITTED FOR BOARD OF TRUSTEE APPROVAL February 25, 2016

NEW COURSE

Course ID: HVAC/R 050C

Course Title: Compressors, Condensers and Cooling Towers

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Prerequisite: None

Catalog Description: This course provides comprehensive instruction on three major components of

refrigeration and air conditioning systems, compressors, condensers, and cooling towers. Students gain knowledge of reciprocating, rotary, screw, centrifugal, and scroll compressors, as well as classifications of compressors (open, semi-hermetic, and hermetic). Air condensers, water-cooled condensers, evaporative condensers

and cooling towers, and water treatment are also covered.

Schedule Description: This course provides comprehensive instruction on three major components of

refrigeration and air conditioning systems, compressors, condensers, and cooling towers. Students gain knowledge of reciprocating, rotary, screw, centrifugal, and scroll compressors, as well as classifications of compressors (open, semi-hermetic, and hermetic). Air condensers, water-cooled condensers, evaporative condensers

and cooling towers, and water treatment are also covered.

Rationale: This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 051C

Course Title: Heating Fundamentals

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Prerequisite: None

Catalog Description: This is one of three courses of a three-semester national training course offered by

the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) and is a comprehensive study of compressors, condensers, and accessories. This course is designed to help certify journeymen-

level refrigeration technicians and keep their knowledge current.

Schedule Description: This is one of three courses of a three-semester national training course offered by

the Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE) and is a comprehensive study of compressors, condensers, and accessories. This course is designed to help certify journeymen-

level refrigeration technicians and keep their knowledge current.

Rationale: This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

Course ID: HVAC/R 052C

Course Title: Heating Transfer & Distribution

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Prerequisite: None

Catalog Description: This course introduces the basic principles of heat transfer, radiation, conduction,

and convection are explained in detail, along with estimating heat loads for residential structures and the principles of air distribution. Included are lessons related to fans and blowers and instruction on fan laws, fan classifications,

centrifugal fans, and fan efficiency.

Schedule Description: This course introduces the basic principles of heat transfer, radiation, conduction,

and convection are explained in detail, along with estimating heat loads for residential structures and the principles of air distribution. Included are lessons related to fans and blowers and instruction on fan laws, fan classifications,

centrifugal fans, and fan efficiency.

Rationale: This course is part of the new Refrigeration Service Engineers Society (RSES)

Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 055C Course Title: Gas Heating

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Prerequisite: None

Catalog Description: This course explores the concepts of heating with gas. Included in the course are

lessons related to combustion chemistry, heating fuels, burners and accessories, burners and components (including natural gas-burning and LP gas-equipment), start-up and combustion efficiency testing, gas burner controls, ignition systems for infrared heaters, gas heating equipment maintenance, troubleshooting, and

condensing furnaces.

Schedule Description: This course explores the concepts of heating with gas. Included in the course are

lessons related to combustion chemistry, heating fuels, burners and accessories, burners and components (including natural gas-burning and LP gas-equipment), start-up and combustion efficiency testing, gas burner controls, ignition systems for infrared heaters, gas heating equipment maintenance, troubleshooting, and

condensing furnaces.

Rationale: This course is part of the new Refrigeration Service Engineers Society (RSES)

Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 056C
Course Title: Hot Water Heating

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Prerequisite: None

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

Catalog Description: This course offers instruction in the principles and theories of hot water heating.

Students will learn about hot water boilers and controls, heat transfer units, centrifugal pumps, air controls, hot water specialties, piping methods, pressure drop calculations, zoning, primary/secondary pumping, radiant heating systems, temperature controls, troubleshooting system components, and analysis of system

problems.

Schedule Description: This course offers instruction in the principles and theories of hot water heating.

Students will learn about hot water boilers and controls, heat transfer units, centrifugal pumps, air controls, hot water specialties, piping methods, pressure drop calculations, zoning, primary/secondary pumping, radiant heating systems, temperature controls, troubleshooting system components, and analysis of system

problems.

Rationale: This course is part of the new Refrigeration Service Engineers Society (RSES)

Certificate in the HVAC Department.

TOP Code: 0946.00

Course not offered at CHC. Equate:

Effective: Fall 2016

Course ID: HVAC/R 057C

Course Title: Tools, Controls, And Troubleshooting

Units:

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Departmental

ENGL 914 Advisory:

Catalog Description: This course is one of a three-semester national training course offered by the

Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE). It is a comprehensive study of the tools of the trade and control diagnostics with testing instruments. This course is designed to help students seeking journeymen-level certification as refrigeration technicians and

keep abreast of current technology.

Schedule Description: This course is one of a three-semester national training course offered by the

> Refrigeration Service Engineers Society (RSES) and the North American Technician Excellence (NATE). It is a comprehensive study of the tools of the trade and control diagnostics with testing instruments. This course is designed to help students seeking journeymen-level certification as refrigeration technicians and

keep abreast of current technology.

Rationale: This course is part of the new Refrigeration Service Engineers Society (RSES)

Certificate in the HVAC Department.

0946.00 TOP Code:

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 060C

Course Title: Troubleshooting Refrigeration and A/C Electricity 4

Units:

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Departmental

ENGL 914 Advisorv:

Catalog Description: This is a one semester course that includes the first of a three-term course offered

> by the Refrigeration Service Engineers Society (RSES) and is a comprehensive study of troubleshooting HVAC/R electrical circuits. This course is designed to help

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

certify journeymen-level refrigeration technicians and keep their knowledge

current.

Schedule Description: This is a one semester course that includes the first of a three-term course offered

by the Refrigeration Service Engineers Society (RSES) and is a comprehensive study of troubleshooting HVAC/R electrical circuits. This course is designed to help certify journeymen-level refrigeration technicians and keep their knowledge

current.

Rationale: This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 061C

Course Title: Troubleshooting Refrigeration and A/C Electricity 5

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Departmental

Advisory: ENGL 914

Catalog Description: This is a one semester course that includes the second of a three-term course

offered by the Refrigeration Service Engineers Society (RSES) and is a comprehensive study of troubleshooting HVAC/R electrical circuits. This course is designed to help certify journeymen-level refrigeration technicians and keep their

knowledge current.

Schedule Description: This is a one semester course that includes the second of a three-term course

offered by the Refrigeration Service Engineers Society (RSES) and is a comprehensive study of troubleshooting HVAC/R electrical circuits. This course is designed to help certify journeymen-level refrigeration technicians and keep their

knowledge current.

Rationale: This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 062C

Course Title: RSES Electricity and Electricity Lab for HVAC/R Technicians

Units:

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Laboratory: 3 contact hour(s) per week

48 - 54 contact hours per semester

Prerequisite: HVAC/R 060C and HVAC/R 061C

Departmental

Catalog Description:

ENGL 914

Advisory:

This is a one semester course offered by the Refrigeration Service Engineers Society that includes a "Hands on Lab" with emphasis on electrical safety, the fundamentals of electricity, series and parallel circuits, A/C current, magnetism and transformers, relays, contactors, starters, motors and capacitors, compressors, circuit protection devices, and thermostats. Also included are lessons on reading schematics, and troubleshooting gas furnaces and split-systems. This course is designed to help certify journeymen-level refrigeration technicians and keep their

knowledge current.

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

Schedule Description: This is a one semester course offered by the Refrigeration Service Engineers

Society that includes a "Hands on Lab" with emphasis on electrical safety, the fundamentals of electricity, series and parallel circuits, A/C current, magnetism and transformers, relays, contactors, starters, motors and capacitors, compressors, circuit protection devices, and thermostats. Also included are lessons on reading schematics, and troubleshooting gas furnaces and split-systems. This course is designed to help certify journeymen-level refrigeration technicians and keep their

Rationale: This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 065C

Course Title: RSES Technical Institute Heat Pump Training Course Volume I

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Departmental

Advisory:

ENGL 914

knowledge current.

Catalog Description: This is a one semester course that includes the first of two heat pump classes

offered by the Refrigeration Service Engineers Society and is a comprehensive introduction to heat pump theory, fundamentals, and includes water-source heat pumps. Students will also study heat pump compressors, flow controls and accessories; heat pump electrical systems and components, thermostats; air-to-air heat pump defrost; supplemental electric heat; fossil fuel backup heat and heat pump piping. Additional subjects include heat pump performance criteria; checks; and procedures. This course is designed to help certify journeymen-level

refrigeration technicians and keep their knowledge current.

Schedule Description: This is a one semester course that includes the first of two heat pump classes

offered by the Refrigeration Service Engineers Society and is a comprehensive introduction to heat pump theory, fundamentals, and includes water-source heat pumps. Students will also study heat pump compressors, flow controls and accessories; heat pump electrical systems and components, thermostats; air-to-air heat pump defrost; supplemental electric heat; fossil fuel backup heat and heat pump piping. Additional subjects include heat pump performance criteria; checks; and procedures. This course is designed to help certify journeymen-level

refrigeration technicians and keep their knowledge current.

Rationale: This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 066C

Course Title: RSES Technical Institute Heat Pump Training Course Volume II

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Departmental ENGL 914

Advisory:

Catalog Description: This is a one semester course that includes the second of two heat pump classes

offered by the Refrigeration Service Engineers Society, and is an advanced class for heat pump troubleshooting, and includes water-source heat pumps, and water

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

source heat pumps for special applications. Students will study both standard and high-efficiency air-to-air heat pump electrical and refrigerant-side troubleshooting, (both heating, and cooling). Students will also do heat pump load calculations, indoor air distribution, duct design with emphasis on diagnosing air flow problems. Customer relations will also be addressed. This course is designed to help certify journeymen-level refrigeration technicians, and keep their knowledge current.

Schedule Description:

This is a one semester course that includes the second of two heat pump classes offered by the Refrigeration Service Engineers Society, and is an advanced class for heat pump troubleshooting, and includes water-source heat pumps, and water source heat pumps for special applications. Students will study both standard and high-efficiency air-to-air heat pump electrical and refrigerant-side troubleshooting, (both heating, and cooling). Students will also do heat pump load calculations, indoor air distribution, duct design with emphasis on diagnosing air flow problems. Customer relations will also be addressed. This course is designed to help certify journeymen-level refrigeration technicians, and keep their knowledge current.

Rationale: This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 067C

Course Title: RSES Technical Institute Training Manual 3 Volume I

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Departmental

Advisory: ENGL 914

Catalog Description: This is the first term class of the two-term Training Manual 3 classes offered by the

Refrigeration Service Engineers Society and is a comprehensive introduction to heat pump theory, including water-source heat pumps. Students will also study fans and blowers, economizers, computer room environmental controls, air filtration and distribution, cooling towers, and water treatment. Additional subjects include, evaporative condensers, heat transfer coils, and closed-circuit water coolers. These courses are designed to help certify journeymen-level refrigeration

technicians and keep their knowledge current.

Schedule Description: This is the first term class of the two-term Training Manual 3 classes offered by the

Refrigeration Service Engineers Society and is a comprehensive introduction to heat pump theory, including water-source heat pumps. Students will also study fans and blowers, economizers, computer room environmental controls, air filtration and distribution, cooling towers, and water treatment. Additional subjects include, evaporative condensers, heat transfer coils, and closed-circuit water coolers. These courses are designed to help certify journeymen-level refrigeration

technicians and keep their knowledge current.

Rationale: This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

Course ID: HVAC/R 068C

Course Title: RSES Technical Institute Training Manual 3 Volume II

Units: 3

Lecture: 3 contact hour(s) per week

48 - 54 contact hours per semester

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

Departmental Advisory:

ENGL 914

Catalog Description:

This is the second term class of the two-term Training Manual 3 classes offered by the Refrigeration Service Engineers Society and is a comprehensive introduction to heat pump theory, including water-source heat pumps. Students will also study fans and blowers, economizers, computer room environmental controls, air filtration and distribution, cooling towers, and water treatment. Additional subjects include, evaporative condensers, heat transfer coils, and closed-circuit water coolers. These courses are designed to help certify journeymen-level refrigeration technicians and keep their knowledge current.

Schedule Description:

This is the second term class of the two-term Training Manual 3 classes offered by the Refrigeration Service Engineers Society and is a comprehensive introduction to heat pump theory, including water-source heat pumps. Students will also study fans and blowers, economizers, computer room environmental controls, air filtration and distribution, cooling towers, and water treatment. Additional subjects include, evaporative condensers, heat transfer coils, and closed-circuit water coolers. These courses are designed to help certify journeymen-level refrigeration

technicians and keep their knowledge current. This course is part of the new RSES Certificate in the HVAC Department.

TOP Code: 0946.00

Equate: Course not offered at CHC.

Effective: Fall 2016

COURSE DELETION

BIOL 202

Rationale:

Rationale: Courses are no longer offered.

Effective: Fall 2016

NEW CERTIFICATE

Industrial Automation Certificate

Students will be prepared for high paying careers in the many existing and future automated manufacturing plants, smart warehouses, and high technology distribution and material handling centers, usually located near major railroad hubs, airports, and interstate freeways. Nearly every product in the supply chain is processed through a complex network of automated material handling, transportation, and logistics centers. This certificate program focuses on the electronic technology responsible for monitoring, controlling, and actuating automated processes involved with all phases of material processing, packaging, and handling systems. Students will be equipped with technical information on mechanical, electrical, analog and digital electronics, Programmable Logic Controllers (PLCs), Programmable Automation Controllers (PACs), Supervisory Control and Data Acquisition (SCADA) systems, fluid power systems, computer hardware and software, networking, interfacing, robotics, sensors and actuators typically used in automated equipment.

These courses are all required for the Industrial Automation certificate:

OSHA035 Federal OSHA Outreach:

General Industry Safety

ELECTR110 **Direct Current Circuit**

Analysis

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

Board of Trustees Meeting: February 25, 2016

Units

2

3

ELECTR111	Direct Current Circuit Laboratory	1
ELECTR115	Alternating Current Circuit Analysis	3
ELECTR116	Alternating Current Circuit Laboratory	1
ELEC101	Supply Chain Technology	3
ELEC217C	Industrial Electricity	4
ELEC218C	Controlling Industrial Electricity	4
ELEC219C	Industrial Electronic Systems Controls II	4
ELECTR265	Digital Logic Design	4

Units

PID 567

Total Units 29

This is a Gainful Employment Program

Rationale:

Students will be prepared for high paying careers in the many existing and future automated manufacturing plants, smart warehouses, and high technology distribution and material handling centers, usually located near major railroad hubs, airports, and interstate freeways. Nearly every product in the supply chain is processed through a complex network of automated material handling, transportation, and logistics centers. This certificate program focuses on the electronic technology responsible for monitoring, controlling, and actuating automated processes involved with all phases of material processing, packaging, and handling systems. Students will be equipped with technical information on mechanical, electrical, analog and digital electronics, Programmable Logic Controllers (PLCs), Programmable Automation Controllers (PACs), Supervisory Control and Data Acquisition (SCADA) systems, fluid power systems, computer hardware and software, networking, interfacing, robotics, sensors and actuators

typically used in automated equipment.

Effective: Fall 2016

RSES Certification in HVAC Certificate

This certificate is designed to prepare students for advanced level of employment. These training courses are aligned with the North American Technician Excellence (NATE) industry organization. Technicians who successfully complete one or more of these courses may receive credit toward renewing their NATE certification.

REQUIRED COURSES:		Units
HVAC/R050C	Compressors, Condensers and Cooling Towers	3
HVAC/R051C	Heating Fundamentals	3
HVAC/R052C	Heating Transfer & Distribution	3

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

HVAC/R055C	Gas Heating	3
HVAC/R056C	Hot Water Heating	3
HVAC/R057C	Tools, Controls, And Troubleshooting	3
HVAC/R060C	Troubleshooting Refrigeration and A/C Electricity 4	3
HVAC/R061C	Troubleshooting Refrigeration and A/C Electricity 5	3
HVAC/R062C	RSES Electricity and Electricity Lab for HVAC/R Technicians	4
HVAC/R065C	RSES Technical Institute Heat Pump Training Course Volume I	3
HVAC/R066C	RSES Technical Institute Heat Pump Training Course Volume II	3
HVAC/R067C	RSES Technical Institute Training Manual 3 Volume I	3
HVAC/R068C	RSES Technical Institute Training Manual 3 Volume II	3

Total Units 40

PID 538

This is a Gainful Employment Program

Rationale: This certificate is designed to prepare students for advanced level of employment.

These training courses are aligned with the North American Technician Excellence (NATE) industry organization. Technicians who successfully complete one or more of these courses may receive credit toward renewing their NATE certification.

Effective: Fall 2016

NEW DEGREE

Biology Transfer Degree (AS-T)

The Associate in Science for Transfer (AS-T) in Biology provides opportunities for students through the Student Transfer Achievement Reform Act (SB 1440). The law states that students will have guaranteed admission to a California State University (CSU) campus upon successful completion of the specified program requirements. Students should consult with a counselor to determine whether this degree is the best option for their transfer goals.

The Student Transfer Achievement Reform Act (Senate Bill 1440, now codified in California Education Code sections 66746-66749) guarantees admission to a California State University (CSU) campus for any community college student who completes an "associate degree for transfer", a newly established variation of the associate degrees traditionally offered at a California community college. The Associate in Arts for Transfer (AA-T) or the Associate in Science for Transfer (AS-T) is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. Students completing these degrees (AA-T or AS-T) are guaranteed admission to the CSU system, but not to a particular campus or major. In

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

order to earn one of these degrees, students must complete a minimum of 60 required semester units of CSU-transferable coursework with a minimum GPA of 2.0. Students transferring to a CSU campus that does accept the AA-T or AS-T will be required to complete no more than 60 units after transfer to earn a bachelor's degree (unless the major is a designated "high unit" major). This degree may not be the best option for students intending to transfer to a particular CSU campus or to a university or college that is not part of the CSU system. Students should consult with a counselor when planning to complete the degree for more information on university admission and transfer requirements.

To earn this AS-T degree, students must meet the following requirements:

- completion of the following major requirements with grades of C or better;
- completion of 60 CSU transferable semester units with a grade point average of at least 2.0; and
- certified completion of the CSU General Education-Breadth (CSUGE) or Intersegmental General Education Transfer Curriculum (IGETC) for CSU, which requires a minimum of 39 units

It is highly recommended that students complete courses that satisfy the U.S. History, Constitution, and American Ideals requirement as part of CSUGE or IGETC before transferring to a CSU.

Students planning to transfer to a four-year institution and major in Biology should consult with a STEM counselor or general counselor regarding the transfer process and lower division requirements. Completion of CSU GE-Breadth or STEM IGETC for the UC or CSU is required in addition to the major requirements.

	Units
Cell and Molecular Biology	4
Organismal Biology	4
Evolutionary Ecology	4
	Units
Conoral Chomistry I	5
•	5
	5
-	5
	_
General Chemistry II	5
or	
General Chemistry II - Honors	5
and	
Single Variable Calculus I	4
General Physics for the Life Sciences I	5
General Physics for the Life Sciences II	5
	Units
Organic Chemistry I	4
or	
Organic Chemistry I - Honors	4
	Organismal Biology Evolutionary Ecology General Chemistry I or General Chemistry I - Honors and General Chemistry II or General Chemistry II - Honors and Single Variable Calculus I General Physics for the Life Sciences I General Physics for the Life Sciences II Organic Chemistry I or

Units

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16

Major Total: 40

CSU GE-Breadth or IGETC for CSU requirements: 20

Units

CSU electives (as needed to reach 60 transferrable units): 0-3

Units

Total Units 60

PID 520

Rationale: The current BIOL AS Degree prepares students for transfer to a CSU campus, but

it does not guarantee admission as junior-level status. The proposed BIOL AS-T degree guarantees junior-level entry and improves biological preparation for entering any CSU and UC campus. Moreover, Biol 202 (current course in BIOL AS) does not conform to C-ID requirements. The new Biology course series in BIOL

AS-T is consistent with C-ID course content.

Effective: Fall 2016

CORRECTIONS

The March 2015 Board Document contained the following errors:

Course ID: HIST 175 **Correction:** HIST 176

The June 2015 Board Document contained the following errors:

COURSE ID	COURSE TITLE
BIOL 201	CELL AND MOLECULAR BIOLOGY

Prerequisite: ENGL 015 or eligibility for ENGL 101 or ENGL 101H as determined by the SBVC

process and CHEM 150 or CHEM 150H and MATH 095 or eligibility for Math 102

as determined by the SBVC assessment process.

Correction: CHEM 150 or CHEM 150H

Departmental ENGL 101 or ENGL 101H or eligibility for ENGL 102 or ENG 102H as determined

Advisory: by the SBVC assessment process.

Correction: CHEM 150 or CHEM 150H

Curriculum Meeting: 12-7-15 Conjoint Meeting: 1-27-16