

Trinity Valley Community College

Core Curriculum Master Syllabi



February 25, 2015



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Art Appreciation

Prefix and Number: ARTS 1301

Division – Department: Speech & Fine Arts - Art

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A general introduction to the visual arts designed to create an appreciation of the vocabulary, media, techniques, and purposes of the creative process. Students will critically interpret and evaluate works of art within cultural contexts.

Prerequisites/co requisites:

None

Topical Outline:

Unit 1: Introduction and Fundamentals

Unit 2: Media and Processes

Unit 3: History and Context

Unit 4: Themes

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Apply art terminology as it specifically relates to works of art.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
2. Demonstrate knowledge of art elements and principles of design.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
3. Differentiate between the processes and materials used in the production of various works of art.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.

4. Critically interpret and evaluate works of art.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
5. Demonstrate an understanding of the impact of arts on culture.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
6. Demonstrate an awareness of the visual world, optical facts, and the “language of vision”	CT TW	Art projects, based on a principle learned in class, which require students to use their imagination and solve problems of design in the production of their end goal/product. This can be done in a group setting which would require the student to divide tasks and share equally within the group in the production of the final product.
7. Identify various artists, their styles, and creative processes, and various media	CT CM TW SR	<p>Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content. One component of the essay could explore the artist’s contribution to the needs of his/her community, state, or nation. Presentation would require a final product in the form of a visual aid.</p> <p>Flash card, discussion board, and/or structured game for which students are assessed based on participation within a group</p>
8. Demonstrate an awareness of various museums and their collections	SR	Internet scavenger hunts and/or gallery and museum visits which require students to apply knowledge in real world settings.
9. Demonstrate a knowledge of a new vocabulary and new ways of seeing/communicating about art	CT CM TW	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content. Presentation would require a final product in the form of a visual aid.

		Flash card, discussion board, and/or structured game for which students are assessed based on participation within a group.
10. Demonstrate an understanding of the importance of artists as recorders and contributors to history	CT CM SR	<p>Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.</p> <p>Mock interviews/newspaper reporting require students to use their imagination in formulating questions and answers which ask the artist to share their opinions and concerns about community, state, or national issues and needs as well as factual historical information found within the artwork</p>
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: The course grade will consist of performance on unit tests; each test will include slide identification of artists, style, medium, and museum. There will be at least four units of study, and each unit test will comprise several chapters.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Department Coordinator Sue Lynn Trent	Signature Sue Lynn Trent	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: Art History I

Prefix and Number: ARTS 1303

Division – Department: Speech & Fine Arts - Art

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A chronological analysis of the historical and cultural contexts of painting, sculpture, architecture, and related visual arts from prehistoric times to the 14th century.

Prerequisites/co requisites:

None

Topical Outline:

Unit 1: Prehistory (including Near East and Aegean) and Egypt

Unit 2: Greece, Etruscans, and Rome

Unit 3: Early Christians and Byzantine Art

Unit 4: Middle Ages

Unit 5: Romanesque and Gothic

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Identify and describe works of art based on their chronology and style, using standard categories and terminology.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
2. Investigate major artistic developments and significant works of art from prehistoric times to the 14th century.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
3. Analyze the relationship of art to history by placing works of art within cultural, historical, and chronological contexts.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
4. Critically interpret and evaluate	CT	Formal essays and/or presentation

works of art.	CM	work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
5. Demonstrate the ability to utilize a descriptive vocabulary using the language of art.	CT CM TW	<p>Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content. Presentation would require a final product in the form of a visual aid.</p> <p>Flash card, discussion board, and/or structured game for which students are assessed based on participation within a group.</p>
6. Identify various artists, their styles, and the time period in which they lived.	CT CM TW SR	<p>Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content. One component of the essay could explore the artist's contribution to the needs of his/her community, state, or nation. Presentation would require a final product in the form of a visual aid.</p> <p>Flash card, discussion board, and/or structured game for which students are assessed based on participation within a group</p>
7. Demonstrate an awareness of the global culture of art.	CT SR	Internet scavenger hunts and/or gallery and museum visits which require students to apply knowledge of a variety of cultures in real world settings. Students will identify artistic characteristics of one or more cultures and apply these characteristics to another culture to see if these cultures could show a degree of connectedness

8. Demonstrate an understanding of the importance of artists as recorders and contributors to history.	CT CM SR	<p>Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content. Presentation would require a final product in the form of a visual aid.</p> <p>Mock interviews/newspaper reporting require students to use their imagination in formulating questions and answers which ask the artist to share their opinions and concerns about community, state, or national issues and needs as well as factual historical information found within the artwork.</p>
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
METHODS OF INSTRUCTION:

METHODS OF EVALUATION: A test will be administered after each unit of study; each unit of study may comprise one or more chapters. A written report will be required and will count as a test. A comprehensive final exam will be given and will count $\frac{1}{4}$ of the course grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Department Coordinator Sue Lynn Trent	Signature Sue Lynn Trent	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: Art History II

Prefix and Number: ARTS 1304

Division – Department: Speech & Fine Arts - Art

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A chronological analysis of the historical and cultural contexts of painting, sculpture, architecture, and related visual arts from the 14th century to the present day.

Prerequisites/co requisites:

None

Topical Outline:

Unit 1: Renaissance Art and the Baroque

Unit 2: Eighteenth and Nineteenth Centuries

Unit 3: Impressionism, Post-Impressionism, and Expressionism

Unit 4: Twentieth Century Styles

Unit 5: Contemporary Art

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Course Learning Outcomes	Core Objective(s) Met	Suggested Learning Activities
1. Identify and describe works of art based on their chronology and style, using standard categories and terminology.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
2. Investigate major artistic developments and significant works of art from the 14 th century to the present day.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.

3. Analyze the relationship of art to history by placing works of art within cultural, historical, and chronological contexts.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
4. Critically interpret and evaluate works of art.	CT CM	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content.
5. Demonstrate the ability to utilize a descriptive vocabulary using the language of art.	CT CM TW	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content. Presentation would require a final product in the form of a visual aid. Flash card, discussion board, and/or structured game for which students are assessed based on participation within a group.
6. Identify various artists, their styles, and the time period in which they lived.	CT CM TW SR	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content. One component of the essay could explore the artist's contribution to the needs of his/her community, state, or nation. Presentation would require a final product in the form of a visual aid. Flash card, discussion board, and/or structured game for which students are assessed based on participation within a group
7. Demonstrate an awareness of the global culture of art.	CT SR	Internet scavenger hunts and/or Gallery and Museum visits which require students to apply knowledge of a variety of cultures in real world settings. Students will identify artistic characteristics of one or more cultures and apply these characteristics to another culture to see if these cultures could show a degree of connectedness

8. Demonstrate an understanding of the importance of artists as recorders and contributors to history.	CT CM SR	Formal essays and/or presentation work which assesses the mechanics, structure, connection of content to the main topic, logic, and accuracy and/or depth of content. Presentation would require a final product in the form of a visual aid. Mock interviews/Newspaper reporting require students to use their imagination in formulating questions and answers which ask the artist to share their opinions and concerns about community, state, or national issues and needs as well as factual historical information found within the artwork.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

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Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: A test will be administered after each unit of study; each unit of study may comprise one or more chapters. A written report will be required and will count as a test. A comprehensive final exam will be given and will count $\frac{1}{4}$ of the course grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Department Coordinator Sue Lynn Trent	Signature Sue Lynn Trent	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: Business Computer Applications

Prefix and Number: BCIS 1305

Division – Department: Business – Computer Science

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Computer terminology, hardware, software, operating systems, and information systems relating to the business environment. The main focus of this course is on business applications of software, including word processing, spreadsheets, databases, presentation graphics, and business-oriented utilization of the Internet.

Prerequisites/Co-requisites:

None

Topical Outline:

Understand and productively use:

- Computers
- Operating Systems
- Ethical considerations involved with software piracy, personal privacy, and system security
- File Management
- Word Processing, Presentation, Spreadsheet, and Database Management Software
- Analytical approaches to application usage for document creation

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Create spreadsheets using formulas, formatting for readability, and data display charts	CT CM	After step-by-step introductory exercises, students will create a spreadsheet that requires the correct usage of formulas/functions and relative and absolute cell addressing. Student will create an appropriate chart illustrating the spreadsheet data.
2. Explain the guiding principles of professional behavior in computing.	CT CM TW PR	Working in teams, students will design a document or presentation to show a competent understanding of software piracy. Assessment will include the synthesis of the final project into a cohesive document or PowerPoint

		presentation. Successful accomplishment of the task will display project management, delegation, and collaboration skills. Students will also perform a post project analysis of team effectiveness.
3. Describe the fundamentals of Information Technology (IT) infrastructure components: hardware, software, and data communications systems.	CT CM	Using pictures, drawings, or illustrations, students will create a pictorial glossary/journals of key information technology components
4. Demonstrate proper file management techniques to manipulate electronic files and folders in a local and networked environment.	CM TW	Working in small groups, students will present proper techniques to manipulating electronic files and critique their peers' performances
5. Use business productivity software to manipulate data and find solutions to business problems.	CT CM TW PR	Students will create presentations on importing data from documents, spreadsheets, databases, and/or Internet resources to find solutions to business problems.
6. Explain the concepts and terminology used in the operation of application systems in a business environment.	CT CM	Working in small groups, students will explain terminology used in the application systems and critique their peers' explanations.
7. Use presentation software to create slides with text, graphics, and animations.	CT CM PR	Students will create pamphlets, resumes, etc. utilizing the features of available software and focus on presenting personal strengths and marketing personal skills.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF EVALUATION: The course grade is determined by a combination of assignments, exams, group projects, and discussions.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
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Prepared by Maribeth McAnally	Signature Maribeth McAnally	Date Fall 2013
Division Chair David Loper	Signature David Loper	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: General Biology for Science Majors I

Prefix and Number: BIOL 1406

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: MATH 1414 College Algebra or concurrent enrollment in higher-level Math
Co-requisite: Laboratory for BIOL 1406 General Biology I

Topical Outline:

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<u>LECTURE</u>		
1. Describe the characteristics of life.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.

<p>2. Explain the methods of inquiry used by scientists.</p>	<p>CT CM EQ TW</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>
<p>3. Identify the basic requirements of life and the properties of the major molecules needed for life.</p>	<p>CT CM EQ TW</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>
<p>4. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.</p>	<p>CT CM EQ TW</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>

5. Describe the structure of cell membranes and the movement of molecules across a membrane.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
6. Identify the substrates, products, and important chemical pathways in metabolism.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
7. Identify the principles of inheritance and solve classical genetic problems.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.

8. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
9. Describe the unity and diversity of life and the evidence for evolution through natural selection.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
<u>LAB</u>		
10. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.	CT1 CM5 TW1	Students will work in groups to apply the principles of microscopy functionally to the components of the microscopes and their relationship to relative magnification, resolution, inversion, depth of field, focal plane, and contrast. Students will produce a written report portfolio that graphically demonstrates the relationship between microscopic samples analyzed in lab (report content) and the main topic principles listed above.

11. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
12. Communicate effectively the results of scientific investigations.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
13. Describe the characteristics of life.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.

<p>14. Explain the methods of inquiry used by scientist.</p>	<p>CT3 CM3 EQ4 TW3</p>	<p>Students work together in groups and divide and share measurement responsibilities to utilize balances, Pasteur pipets, volumetric flasks, beakers, serological pipettes, and/or micropipettes to methods of scientific inquiry to apply the principles of density, mass, volume, and the metric system to validate volumetric measurement error and accuracy and determine which devices are the most and least accurate. Students will record the results of replicate quantitative measurements (tabular) and calculate averages to analyze the significance of their results and use written communication to explain the connection between their experimental content and the main topic of the metric system.</p>
<p>15. Identify the basic properties of substances needed for life.</p>	<p>CT CM EQ TW</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>
<p>16. Compare and contrast the structures, reproduction, and characteristics of viruses, prokaryotic cells, and eukaryotic cells.</p>	<p>CT CM EQ TW</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>

17. Describe the structure of cell membranes and the movement of molecules across a membrane.	CT3 CM3 EQ4 TW3	Students work together in groups and divide and share measurement responsibilities to apply the principles of cell membrane structure such as tonicity and polar/nonpolar compounds to the movement of compounds across the cell membrane. Students will use quantitative measures (tabular, graphing) such as change in weight to determine the effect of solution tonicity on movement of water in experimental samples. Students will use written communication to explain the connection between their experimental results (content) and the main topic of the membrane function .
18. Identify the substrates, products, and important chemical pathways in metabolism.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
19. Identify the principles of inheritance and solve classical genetic problems.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.

20. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
21. Describe the unity and diversity of life and the evidence for evolution through natural selection.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF INSTRUCTION: Instruction will be by lecture with audiovisual aids and technological equipment such as chalkboard, films, slides, video, transparencies, models, and computer.

METHODS OF EVALUATION: Grading will consist of periodic exams in lab and lecture and lab reports in lab.

The overall final course grade will comprise of 75% of the final lecture grade and 25% of the final lab grade.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
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Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: General Biology for Science Majors II

Prefix and Number: BIOL 1407

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. The diversity and classification of life will be studied, including animals, plants, protists, fungi, and prokaryotes. Special emphasis will be given to anatomy, physiology, ecology, and evolution of plants and animals. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: MATH 1414 College Algebra or concurrent enrollment in higher-level Math
Co-requisite: Laboratory for BIOL 1407 General Biology II

Topical Outline:

Unit 1 EVOLUTION

- 1) Describe conditions of early earth for chemical evolution.
- 2) List items of evidence for evolution.
- 3) Identify conditions or processes leading to speciation.
- 4) Use cladograms to show relationships of taxonomic groups.
- 5) Compare the prokaryote cell to the eukaryote cell.

Unit 2 CHARACTERISTICS OF LIVING PHYLA

- 6) Describe importance of several protistan organisms.
- 7) Classify the fungi according to methods of reproduction.
- 8) Differentiate among the destructive and beneficial fungi.
- 9) Compare development of multicellular plants and algae.
- 10) Recognize systems & functions of vertebrates & invertebrates

Unit 3. ECOLOGY & POPULATIONS

- 11) State significance of population graphs.
- 12) Organize a given set of organisms into correct order by trophic level.
- 13) Describe the flow of carbon & minerals through the ecosystem in biogeochemical cycles.
- 14) Predict importance of predator – prey relationships, competition, & symbiosis to the community.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<u>LECTURE</u>		
1. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.	CT CM EQ TW	Student will observe videos, examine statistics, construct flowcharts and compare characteristics that demonstrate relationships of living things
2. Describe phylogenetic relationships and classification schemes.	CT CM EQ TW	Student will observe videos, examine statistics, construct flowcharts and compare characteristics that demonstrate relationships of living things
3. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.	EQ TW	Student will observe videos, examine statistics, construct flowcharts and compare characteristics that demonstrate relationships of living things
4. Describe basic animal physiology and homeostasis as maintained by organ systems.	EQ TW	Student will explain changes in anatomy of individual systems from one animal to the next based on animal's complexity and adaptations.
5. Compare different sexual and asexual life cycles noting their adaptive advantages.	CT	Student will explain changes in anatomy of individual systems from one animal to the next based on animal's complexity and adaptations.
6. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.	CT EQ	Student will observe videos, examine statistics, construct flowcharts and compare characteristics that demonstrate trends in different periods of earth's history.

<u>LAB</u>		
7. Apply scientific reasoning to investigate questions, and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.
8. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.
9. Communicate effectively the results of scientific investigations.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.
10. Demonstrate knowledge of modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.

11. Distinguish between phylogenetic relationships and classification schemes.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.
12. Identify the major phyla of life with an emphasis on plants and animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.
13. Describe basic animal physiology and homeostasis as maintained by organ systems.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.
14. Compare different sexual and asexual life cycles noting their adaptive advantages.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.

15. Illustrate the relationship between major geologic change, extinctions, and evolutionary trends.	CT CM EQ TW	The student will work in small groups (TW) to carry out or conduct an experiment applying theory from the textbook or lecture (CT) and evaluate the reasonableness of their results (EQ). An oral or written presentation (CM) will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Instruction will be by lecture with audiovisual aids and technological equipment such as chalkboard, films, slides, video, transparencies, models, and computer.

METHODS OF EVALUATION: Students will be evaluated by written testing of facts, theories, principles, concepts, and their application.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: General Botany

Prefix and Number: BIOL 1411

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Fundamental biological concepts relevant to plant physiology, life cycle, growth and development, structure and function, and cellular and molecular metabolism. The role of plants in the environment, evolution, and phylogeny of major plant groups, algae, and fungi. A laboratory Component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: MATH 1414 College Algebra or concurrent enrollment in higher-level Math
Co-requisite: Laboratory for BIOL 1411 General Botany

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<u>LECTURE</u>		
1. Compare and contrast the structures, reproduction, and characteristics of plants, algae, & fungi.	CT CM EQ TW	<p>CT 1: The student is required to produce lab reports detailing the structures and characteristics of plants, algae, and fungi.</p> <p>CT 2: The student is required to solve problems by answering the questions on the exercise.</p> <p>CT 4: The student is required to make connections between the different organisms.</p> <p>CM 2 & 5: The student is required to answer questions graded on connection of content with main topic & accuracy.</p> <p>CM 3: The student is required to Complete a written presentation on each exercise that connects the content to the main topic of that exercise.</p> <p>CM 5: The students are graded on the written presentation to assess the accuracy of its content.</p> <p>EQ 1: The student is required to carry out experiments and solve problems on plants, algae, and fungi.</p> <p>EQ 2: The student is required to</p>

		<p>provide explanations by answering questions on each exercise.</p> <p>EQ 3: The student is required to identify essential information on each exercise by properly identifying the structures of the plants, algae, and fungi.</p> <p>TW 1: The student is required to participate with a lab partner on each lab exercise and assessed for participation.</p> <p>TW 3: The student is assessed for sharing tasks equally with their lab partner.</p>
2. Describe the characteristics of life and the basic properties of substances needed for life.	CT CM EQ TW	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>
3. Identify the principles of inheritance and solve classical genetic problems.	CT CM EQ TW	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>
4. Describe phylogenetic relationships and classification schemes.	CT CM EQ TW	<p>CT 1: The student is required to produce a lab report which includes the phylogenetic or classification for the organism(s) on that exercise.</p> <p>CT 2: The student is required to solve a problem by determining the proper classification for the organism(s) on that exercise.</p> <p>CM 1: The student is required to</p>

		<p>use the proper mechanics in presenting the classification for each organism.</p> <p>CM 2: The student is required to use correct structure (format) in the writing their lab report.</p> <p>CM 3: The student is required to Complete an exercise that connects the classification to the main topic of that exercise.</p> <p>CM 5: The student will be evaluated on the accuracy and depth of the classification on that exercise.</p> <p>EQ 1 and 3: The student is required to solve the problem of determining the proper classification for each organism using the essential characteristics of the phylogenetic classification system.</p> <p>TW 2: The student is required to work with their lab partner to synthesize the proper classification for the organism(s) on exercise.</p> <p>TW 3: The student is required to share equally with their lab partner to determine the classification for the organism(s) on that exercise.</p>
5. Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.	CT CM EQ TW	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy.</p> <p>Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>
6. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.	CT CM EQ TW	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure,</p>

		content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
7. Identify the substrates, products, and important chemical pathways in photosynthesis and respiration.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
8. Describe the unity and diversity of plants and the evidence for evolution through natural selection.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
9. Compare different sexual and asexual life cycles noting their adaptive advantages.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
10. Describe the reasoning processes applied to scientific investigations and thinking.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will

		be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
LAB		
11. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
12. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
13. Communicate effectively the results of scientific investigations.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
14. Compare and contrast the structures, reproduction, and characteristics of plants, algae, and fungi.	CT CM EQ TW	CT 1: The student is required to produce lab reports detailing the structures and characteristics of plants, algae, and fungi. CT 2: The student is required to solve problems and provide

		<p>justification by answering the questions on lab exercises.</p> <p>CT 4: The student is required to make connections between the structures of the different organisms studied.</p> <p>CM 1: The student is required to Complete a written lab report on plants, algae, and fungi graded on mechanics.</p> <p>CM 3: The student is required to Complete a written presentation on each exercise that connects the content to the main topic of that exercise.</p> <p>CM 5: The students are graded on the written presentation to assess the accuracy of its content.</p> <p>EQ 1: The student is required to carry out experiments and solve problems on plants, algae, and fungi.</p> <p>EQ 2: The student is required to provide explanations of how a problem is solved.</p> <p>EQ 3: The student is required to identify essential information on each exercise by properly identifying the structures of the plants, algae, and fungi.</p> <p>TW 1: The student is required to participate with a lab partner on each lab exercise on plants, algae, and fungi.</p> <p>TW 3: The student is required to share tasks equally with their lab partner.</p>
15. Describe the characteristics of life and the basic properties of substances needed for life.	CT CM EQ TW	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy.</p> <p>Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>

16. Identify the principles of inheritance and solve classical genetic problems.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
17. Describe phylogenetic relationships and classification schemes.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
18. Identify the major phyla of life with an emphasis on plants, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
19. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work

		and sharing work.
20. Identify the substrates, products, and important chemical pathways in photosynthesis and respiration.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
21. Describe the unity and diversity of plants and the evidence for evolution through natural selection.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
22. Compare different sexual and asexual life cycles noting their adaptive advantages.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
23. Describe the reasoning processes applied to scientific investigations and thinking.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for

		participation, synthesis of work and sharing work.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Instruction will be by lecture with audiovisual aids and technological equipment such as chalkboard, films, slides, video, transparencies, models, and computer.

METHODS OF EVALUATION: Grading will consist of periodic exams in lab and lecture and lab reports in lab. Lecture will comprise 75% and lab will comprise 25% of the overall grade.

The overall final course grade will comprise of 75% of the final lecture grade and 25% of the final lab grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: General Zoology

Prefix and Number: BIOL 1413

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Fundamental biological concepts relevant to animals, including systematics, evolution, structure and function, cellular and molecular metabolism, reproduction, development, diversity, phylogeny, and ecology. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: MATH 1414 College Algebra or concurrent enrollment in higher-level Math
Co-requisite: Laboratory for BIOL 1413 General Zoology

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<u>LECTURE</u>		
1. Compare and contrast the structures, reproduction, and characteristics of animals.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
2. Describe the characteristics of life and the basic properties of substances needed for life.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing

		work.
3. Identify the principles of inheritance and solve classical genetic problems.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
4. Describe phylogenetic relationships and classification schemes.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
5. Identify the major phyla of life with an emphasis on animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
6. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will

		be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
7. Identify the substrates, products, and important chemical pathways in respiration.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
8. Describe the unity and diversity of animals and the evidence for evolution through natural selection.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
9. Describe the reasoning processes applied to scientific investigations and thinking.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
10. Describe basic animal physiology and homeostasis as maintained by organ systems.	CT CM EQ	Students will work in groups to prepare a written report analyzing the data given and answering

	TW	questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
11. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
12. Describe the structure of cell membranes and the movement of molecules across a membrane.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
<u>LAB</u>		
13. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.	CT CM EQ TW	Students will work in groups to apply the principles of microscopy functionally to the components of the microscopes and their relationship to relative magnification, resolution, inversion, depth of field, focal plane, and contrast. Students will produce a written report portfolio that graphically demonstrates the relationship between microscopic

		<p>samples analyzed in lab (report content) and the main topic principles listed above. Students will work in groups to apply the principles of microscopy functionally to the components of the microscopes and their relationship to relative magnification, resolution, inversion, depth of field, focal plane, and contrast. Students will produce a written report portfolio that graphically demonstrates the relationship between microscopic samples analyzed in lab (report content) and the main topic principles listed above.</p>
<p>14. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.</p>	<p>CT CM EQ TW</p>	<p>Students work together in groups and divide and share measurement responsibilities to utilize balances, Pasteur pipets, volumetric flasks, beakers, serological pipettes, and/or micropipettes to methods of scientific inquiry to apply the principles of density, mass, volume, and the metric system to validate volumetric measurement error and accuracy and determine which devices are the most and least accurate. Students will record the results of replicate quantitative measurements (tabular) and calculate averages to analyze the significance of their results and use written communication to explain the connection between their experimental content and the main topic of the metric system.</p>
<p>15. Communicate effectively the results of scientific investigations.</p>	<p>CT CM EQ TW</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing</p>

		work.
16. Compare and contrast the structures, reproduction, and characteristics of animals.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
17. Describe the characteristics of life and the basic properties of substances needed for life.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
18. Identify the principles of inheritance and solve classical genetic problems.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
19. Describe phylogenetic relationships and classification schemes.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will

		be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
20. Identify the major phyla of life with an emphasis on animals, including the basis for classification, structural and physiological adaptations, evolutionary history, and ecological significance.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
21. Identify the chemical structures, synthesis, and regulation of nucleic acids and proteins.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
22. Identify the substrates, products, and important chemical pathways in respiration.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
23. Describe the unity and diversity of animals and the evidence for evolution through	CT CM EQ	Students will work in groups to prepare a written report analyzing the data given and answering

natural selection.	TW	questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
24. Describe the reasoning processes applied to scientific investigations and thinking.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
25. Describe basic animal physiology and homeostasis as maintained by organ systems.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
26. Describe modern evolutionary synthesis, natural selection, population genetics, micro and macroevolution, and speciation.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation,

		synthesis of work and sharing work.
27. Describe the structure of cell membranes and the movement of molecules across a membrane.	CT CM EQ TW	Students work together in groups and divide and share measurement responsibilities to apply the principles of cell membrane structure such as tonicity and polar/nonpolar compounds to the movement of compounds across the cell membrane. Students will use quantitative measures (tabular, graphing) such as change in weight to determine the effect of solution tonicity on movement of water in experimental samples. Students will use written communication to explain the connection between their experimental results (content) and the main topic of the membrane function.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Instruction will be by lecture with audiovisual aids and technological equipment such as chalkboard, films, slides, video, transparencies, models, and computer.

METHODS OF EVALUATION: Grading will consist of periodic exams in lab and lecture and lab reports in lab.

The overall final course grade will comprise of 75% of the final lecture grade and 25% of the final lab grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Human Anatomy & Physiology I

Prefix and Number: BIOL 2401

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Fundamental principles of living organisms will be studied, including physical and chemical properties of life, organization, function, evolutionary adaptation, and classification. Concepts of cytology, reproduction, genetics, and scientific reasoning are included. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: TSI complete in Reading

Co-requisite: Laboratory for BIOL 2401 Anatomy & Physiology I

Topical Outline:

1. Organization, homeostasis, and regulatory mechanisms in living systems
 - A. Levels of organization
 - B. Homeostasis mechanisms
2. Basic principles of chemistry and physics as they relate to the living system
 - A. Atomic structure
 - B. Molecular structure
 - C. Chemical bonding & reactions
 - D. Molecules of life
3. Metric system measurements
 - A. Metric units & conversions
 - B. Temperature scales & conversions
4. Cell structure & function
 - A. Cell anatomy
 - B. Cellular transport processes
 - C. Cell division
 - D. Cell metabolism
5. Body tissue types and functions
 - A. Fundamental tissue types
 - B. Histological organization
6. Integumentary system structure and function
 - A. Structure of skin
 - B. Protective mechanisms
 - C. Thermoregulation
 - D. Disorders
7. Skeletal system structure and function
 - A. Bone nomenclature
 - B. Bone histology
 - C. Bone growth and maintenance
 - D. Articulations
 - E. Disorders
8. Muscular system structure and function
 - A. Muscle nomenclature
 - B. Muscle histology
 - C. Contractile processes
 - D. Muscle metabolism
 - E. Disorders

9. Nervous system structure and function

- A. Neuron types and functions
- B. Central nervous system anatomy
- C. Peripheral nervous system anatomy
- D. Organization of the reflex arc
- E. Essential motor and sensory pathways
- F. Autonomic nervous system functions
- G. The senses
- H. Disorders

10. Endocrine system structure and function

- A. Basic concepts of endocrine regulation
- B. Nomenclature of endocrine glands and products
- C. Common endocrine disorders

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Course Learning Outcomes	Core Objective(s) addressed	Suggested Learning Activities
LECTURE		
1. Explain the process of homeostasis and its regulation	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work

		and sharing work.
2. Demonstrate and understanding of the language of anatomy and physiology and the 11 organ systems of the body.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
3. Demonstrate an understanding of the structure and function of water and organic compounds in living cells.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
4. Explain and compare the different tissues in the human body, their location and function.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
5. Explain the integumentary, skeletal, muscular, nervous, and endocrine systems.	CT1,2 CM4,5 EQ 2, 5 TW1,2, 3	Students will participate together in teams to produce a written case study analysis to solve a problem (pathology) and provide justification for their solution. Students will identify the essential information (key signs and symptoms) for solving the problem. Students will use quantitative measures to produce a timeline of the pathology and

		possible treatments and outcomes. The written presentation will assess the accuracy and depth of content of the analysis and assess the logic of their conclusions. Students will anonymously assess team members on their ability to divide tasks and share equally within the group.
LAB		
6. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.	CT1,2 CM TW1,3 EQ 1,4	Students will participate together in groups to apply the principles of microscopy functionally to the parts of the microscopes and their relationship to relative magnification, resolution, inversion, depth of field, focal plane, and contrast. Students will divide and share equally quantitative measures to demonstrate the relationship between microscopic samples analyzed in lab. Students will produce a final written portfolio (lab report) answering written questions that assess the connection of the content with the main topic and assess the accuracy of the analysis.
7. Use critical thinking and scientific problem-solving to demonstrate an understanding of the metric system and conversions.	TW1,3 EQ 1,2,4 CT1,2 CM 3,5	Students will participate together in teams to divide responsibilities and share equally in an exploration of the metric system. Students will compare accuracy and consistency between varieties of lab equipment. Students will use quantitative measures to compare mass, volume, length and perform common conversions and calculations used in anatomy & physiology. Students will produce a written portfolio (lab report) with a conclusion explaining the accuracy of the instrumentation and the connection between their laboratory results and the main topic of the metric system.
8. Identify regional body terms, body cavities, and directional terms.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make

		corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
9. Compare and contrast the different tissues in the human body and their integration into organs.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
10. Demonstrate and understanding of the composition and structure of the integumentary system, skeletal system, muscle system, nervous system, and endocrine system.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.

Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF INSTRUCTION: Instruction will be by lecture with audiovisual aids and technological equipment such as chalkboard, films, slides, video, transparencies, models, and computer.

METHODS OF EVALUATION: Grading will consist of periodic exams in lab and lecture and lab reports in lab.

The overall final course grade will comprise of 75% of the final lecture grade and 25% of the final lab grade.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
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Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Human Anatomy & Physiology II

Prefix and Number: BIOL 2402

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This course is designed to be a continuation of BIOL 2401. Systems to be covered include the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive. Basic concepts of fluid and electrolyte balance, immunity and metabolism are developed. A laboratory Component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: BIOL 2401 Anatomy & Physiology I

Co-requisite: Laboratory for BIOL 2402 Anatomy & Physiology II

Topical Outline:

1. Structure and function of blood
 - A. Components of blood
 - B. Hematopoiesis
 - C. Hemostasis
 - D. Hematologic tests
 - E. Blood typing
 - F. Common clinical abnormalities
2. Circulatory system structure and function
 - A. Cardiac anatomy & mechanisms
 - B. Vascular anatomy
 - C. Dynamics of the vascular system
 - D. Blood pressure regulation
 - E. Common clinical abnormalities
3. Lymphatic system structure and function
 - A. Lymphatic system components
 - B. Formation and composition of lymph
 - C. Lymph flow
 - D. Defense mechanisms (Immune & nonspecific)
 - E. Homeostatic disorders & infectious diseases
4. Respiratory system structure and function
 - A. Lung structure
 - B. Pulmonary mechanisms
 - C. Blood gas transport
 - D. Pulmonary function tests
 - E. Common clinical abnormalities
5. Digestive system structure and function
 - A. Alimentary tract structure
 - B. Digestive processes
 - C. Nutrient absorption
 - D. Basic nutrition & metabolism
 - E. Homeostatic disorders
6. Urinary system structure and function
 - A. Kidney structure
 - B. Nephron function in urine formation
 - C. Regulation of urine concentration
 - D. Collecting structures
 - E. Micturition
 - F. Urinalysis
 - G. Common clinical abnormalities
7. Body fluid/electrolyte, acid/base balance
 - A. Body fluid composition
 - B. Electrolyte balance
 - C. Acid/base balance
 - D. Common clinical abnormalities

8. Reproductive system structure and function

- A. Male reproductive system structure and function
- B. Female reproductive system and function
- C. Gametogenesis
- D. Hormonal regulation or reproductive processes

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Explain and apply knowledge of the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems' structure and function.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
2. Analyze and explain fluid/electrolyte and acid/base balance	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will

		be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
3. Explain the various components of blood, their structure and function, as well as describe the process of hemostasis	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
LAB		
4. Explain and apply knowledge of the cardiovascular, lymphatic, respiratory, digestive, urinary, and reproductive systems' structure and function.	CT 1,2 CM 4,5 EQ 1,3,4,5 TW 1,3	Students will participate and work together in teams to produce a written case study analysis to solve a problem (pathology) and provide justification for their solution. Students will identify the essential information (key signs and symptoms) for solving the problem. Students will use quantitative measures to produce a timeline of the pathology and possible treatments and outcomes. The written presentation will assess the accuracy and depth of content of the analysis and logic of the presentation. Students will anonymously assess team members on their ability to divide tasks and share equally within the group.
5. Collect, analyze, and manipulate physiological data pertaining to the appropriate body systems	CT 1,2,3 CM 4,5 EQS 1,4 TW 1,3	Students will participate and work together in groups to collect physiological data through experimental means and produce a written report analyzing the reasonableness of the results. In all cases, students will need to relate principles discussed in lecture to the interpretation of results. Students will be assessed based upon the logic of their

		interpretations with the main concept. Students may also use numerical calculations to support the significance of their data, depending upon the system being evaluated. Students will be assessed anonymously on their participation within the group by fellow group members.
6. Examine and evaluate anatomical models and tissue slides pertaining to the appropriate body systems.	CT 1 CM 4 EQ 1	Students will examine and study anatomical models and tissue slides associated with each of the relevant body systems and complete laboratory exercises by providing logical answers to related questions. Students will complete a written exam on the same models and slides and will be evaluated for accurate identification of structures.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Instruction will be by lecture with audiovisual aids and technological equipment such as chalkboard, films, slides, video, transparencies, models, and computer.

METHODS OF EVALUATION: Grading will consist of periodic exams in lab and lecture and lab reports in lab.

The overall final course grade will comprise of 70% of the final lecture grade and 30% of the final lab grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Introduction to Human Anatomy & Physiology

Prefix and Number: BIOL 2404

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Study of the structure and function of human anatomy, including the neuroendocrine, integumentary, musculoskeletal, digestive, urinary, reproductive, respiratory, and circulatory systems. A laboratory component is included that gives practical experience to material covered in class. (This course is not designed to replace BIOL 2401 and/or 2402; this course is an option to help the student prepare for BIOL 2401 or to meet curriculum requirements for certificate programs that require it at other institutions.)

Prerequisites/Co-requisites:

Prerequisite: TSI Complete in Reading

Co-requisite: Laboratory for BIOL 2404 Introduction to Anatomy & Physiology

Topical Outline:

Unit 1	Introduction, Chemistry,
Unit 2	Cells, Metabolism, Tissues & Integument
Unit 3	Skeletal, & Muscular
Unit 4	Nervous, Endocrine, Cardiovascular & Lymphatic
Unit 5	Respiratory, Urinary & Digestion
Unit 6	Reproduction, Embryology & Genetics

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<u>LECTURE</u>		
1. To recognize and compare the general orientation of the human organism.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for

		participation, synthesis of work and sharing work.
2. To demonstrate a general knowledge of chemistry and basic organic and organic molecules.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
3. To recognize and compare the process of Mitosis.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
4. To recognize and compare the processes of membrane transport.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
5. To recognize and compare the general structures and functions of a cell and fundamental tissues .	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for

		participation, synthesis of work and sharing work.
6. To recognize and compare the general structures and functions of the Integumentary, skeletal, muscular, nervous, endocrine, cardiovascular, lymphatic, respiratory, digestive, urinary, & reproductive systems and to relate this to the organism as a whole.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
7. To relate concepts to everyday life and explain that relation related to health and pathology	CT CM EQ TW	Students will work in pairs to complete a Case Study. Students will write a lab report that will be graded mechanics, structure, content, logic, and depth of content following a format given (title, abstract, introduction, materials & methods, results & conclusion). Empirical Quantitative data will be analyzed. Essential information will be identified. Students will diagnose a patient with written justification applying the measurement principles to this new situation and describe how they came to the diagnosis. Group work will be graded on participation, performance & sharing of work.
LAB		
8. To demonstrate a knowledge of the parts of a microscope.	CT CM EQ TW	Students will work in pairs to complete the Microscope lab. Students will write a lab report that will be graded mechanics, structure, content, logic, and depth of content following a format given (title, abstract, introduction, materials & methods, results & conclusion). Empirical Quantitative data will be recorded. Students will determine the field of view with justification applying the measurement principles to this new situation. Group work will be graded on participation, performance & sharing work.
9. To demonstrate concepts of	CT	Students will work in groups to

diffusion and osmosis.	CM EQ TW	complete the Eggsperiment lab. Students will write a lab report that will be graded mechanics, structure, content, logic, and depth of content following a format given (title, abstract, introduction, materials & methods, results & conclusion). Quantitative results will be tabled and graphed. Students will determine the unknown solution with justification applying the principles of diffusion & osmosis to this new situation. Group work will be graded on participation, performance & sharing work.
10. To demonstrate knowledge of human anatomy for organelles, stages of Mitosis, tissues, and the integumentary, skeletal, muscular, nervous & endocrine systems.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
Before the semester begins, contact your division chair for specific details concerning the assignment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Instruction will be by lecture with audiovisual aids and technological equipment such as chalkboard, films, slides, video, transparencies, models, and computer.

METHODS OF EVALUATION: Grading will consist of periodic exams in lab and lecture and lab reports in lab.

The overall final course grade will comprise of 70% of the final lecture grade and 30% of the final lab grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Microbiology for Non-Science Majors

Prefix and Number: BIOL 2420

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Study of the morphology, physiology, and taxonomy of representative groups of pathogenic and nonpathogenic microorganisms. Pure cultures of microorganisms grown on selected media are used in learning laboratory techniques. Includes a brief preview of food microbes, public health, and immunology. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Co-requisite: Laboratory for BIOL 2420 Microbiology for Non-Science Majors

Topical Outline:

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Identify and define the areas and categories within the scope of microbiology. Identify and define the areas and categories within the scope of microbiology.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
2. Identify significant people, dates, and accomplishments in the history of microbiology.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation,

		synthesis of work and sharing work.
3. Identify and explain the history of Microbiology.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
4. Explain taxonomy and identify the Kingdoms and their relationship to microbiology.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
5. Describe, identify, and explain the characteristics of, composition of, modes of infection, replication of, and defense against viruses.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
6. Describe evidence for the evolution of cells, organelles, and major metabolic pathways from early prokaryotes and how phylogenetic trees reflect evolutionary relationships.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will

		be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
7. Identify and give characteristics of the common virus diseases of pets and livestock.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
LAB		
8. Identify the virus, history of, characteristics, modes of transmission, symptoms, complications, treatment, vaccine developments, and latest research on HIV/AIDS.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
9. Explain the cultivation of viruses.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
10. Identify and describe Prions and the diseases they cause.	CT CM EQ	Students will work in groups to prepare a written report analyzing the data given and answering

	TW	questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
11. Identify the roles of proteins and explain genetic engineering, cloning, and the possibility of correcting genetic defects.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
12. Identify and describe the Bacteria that are pathogenic to man.	CT CM EQ TW	<p><u>Case Study: Diagnosis & Assessment</u></p> <p>CT1: Students will be required to create a report.</p> <p>CT2: Students will be required to determine the infectious agent involved.</p> <p>CT5: Students will provide a diagnosis with rationale and treatment as well as risk assessment.</p> <p>CM1: Students are required to write a report.</p> <p>CM2: Structure will be evaluated.</p> <p>CM3: Graded for connection to main topic</p> <p>CM4: Graded for logic process.</p> <p>CM5: graded for accuracy and depth</p> <p>EQ1: Diagnosis is problem solving</p> <p>EQ2; Students will explain how they solved the problem.</p> <p>EQ3: Students will choose pertinent information from that given.</p> <p>EQ5: Diagnosis is the conclusion.</p> <p>TW1&2: Students will work in</p>

		groups and will be assessed for participation, synthesis of the final product.
13. Identify and describe the Protists that are pathogenic to man.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
14. Identify and describe vital and beneficial Fungi.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
15. Identify and describe human fungal pathogens	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
16. Identify and describe bacteria by Genus name, Gram reaction, morphology, oxygen requirements, pathogenic or beneficial role, and specific structural characteristics.	CT CM EQ TW	<u>Determination of Unknowns:</u> CT1: Students will be required to create a report. CT2: Students will be required to determine the infectious agent involved. CT5: Students will provide a

		<p>diagnosis with rationale and treatment as well as risk assessment.</p> <p>CM1: Students are required to write a report.</p> <p>CM2: Structure will be evaluated.</p> <p>CM3: Graded for connection to main topic</p> <p>CM4: Graded for logic process.</p> <p>CM5: graded for accuracy and depth</p> <p>EQ1: Diagnosis is problem solving</p> <p>EQ2; Students will explain how they solved the problem.</p> <p>EQ3: Students will choose pertinent information from that given.</p> <p>EQ5: Diagnosis is the conclusion.</p> <p>TW1&2: Students will work in groups and will be assessed for participation, synthesis of the final product.</p>
17. Classify interactions of microorganisms on human and non-human hosts as neutral, detrimental, or beneficial.	CT CM EQ TW	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.</p>
<p>Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.</p>		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: The principle method used is lecture with teacher-student interaction to create interest and enhance learning. Use of electronic technologies is used as supplements to further enhance learning (computers, laser discs, and videos).

METHODS OF EVALUATION: The major evaluation is composed of examinations and practicals that require knowledge of facts, theories, and principles and their application.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: Microbiology for Science Majors

Prefix and Number: BIOL 2421

Division – Department: Science & Mathematics - Biology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Principles of microbiology, including metabolism, structure, function, genetics, and phylogeny of microbes. The course will also examine the interactions of microbes with each other, hosts, and the environment. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: CHEM 1411 General Chemistry I **plus** one of the following biology sequences for majors (BIOL 1406 & 1407 **or** 1411 & 1413)

Co-requisite: Laboratory for BIOL 2421 Microbiology for Science Majors

Topical Outline:

Unit 1: Microbial Structures and Functions

Unit: 2 Microbial Growth and Metabolism

Unit: 3 Microbial genetics

Unit 4: Microbial-Host Interaction

Unit 5: Industrial and Environmental Microbiology

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Provide examples of the impact of microorganisms on agriculture, environment, ecosystem, energy, and human health, including biofilms.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
2. Identify unique structures, capabilities, and genetic information flow of microorganisms.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate

		alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
3. Compare the life cycles and structures of different types of viruses.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
4. Discuss how microscopy has revealed the structure and function of microorganisms.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
5. Give examples of the range of metabolic diversity exhibited by microorganisms, impact of metabolic characteristics on growth, and control of growth.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
6. Describe evidence for the evolution of cells, organelles, and major metabolic pathways	CT CM EQ	Students will work in groups to prepare a written report analyzing the data given and answering

from early prokaryotes and how phylogenetic trees reflect evolutionary relationships.	TW	questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
7. Describe the causes and consequences of mutations on microbial evolution and the generation of diversity as well as human impacts on adaptation.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
8. Classify interactions of microorganisms on human and non-human hosts as neutral, detrimental, or beneficial.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
LAB		
9. Apply scientific reasoning to investigate questions and utilize scientific tools such as microscopes and laboratory equipment to collect and analyze data.	CT1,2 EQ 2,4 TW1,3 CM 2,5	Students will participate in groups, dividing and sharing equally the tasks of applying the principles of microscopy functionally to the components of the microscopes and their relationship to relative magnification, resolution, inversion, depth of field, focal plane, and contrast. Students will produce a final written portfolio (lab report) that uses quantitative measures to demonstrate the

		relationship between microscopic samples analyzed in lab and provide explanation for their solutions. Students will answer written questions that assess the structure and function of the microscope and the connection of the content with the main topic.
10. Use critical thinking and scientific problem-solving to make informed decisions in the laboratory.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
11. Communicate effectively the results of scientific investigations.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
12. Provide examples of the impact of microorganisms on agriculture, environment, ecosystem, energy, and human health, including biofilms.	CT 1,2 CM2,5 TW1,3 EQ 3,5	Groups will produce a case study analysis. Presentation of historical background, data, and possible treatments. Students will work together in teams to produce a written case study analysis to solve a problem (pathology) and provide justification for their solution. Students will identify the essential information (key signs and symptoms) for solving the problem. Students will use quantitative measures to produce a timeline of the pathology and possible treatments and outcomes.

		The written presentation will assess the accuracy and depth of content of the analysis. Students will anonymously assess team members on their ability to divide tasks and share equally within the group.
13. Identify unique structures, capabilities, and genetic information flow of microorganisms.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
14. Compare the life cycles and structures of different types of viruses.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
15. Discuss how microscopy has revealed the structure and function of microorganisms.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
16. Give examples of the range of metabolic diversity exhibited by microorganisms, impact of	TW1,3 CM, CT,	Groups will work together to produce a written portfolio of the identification of unknown

metabolic characteristics on growth, and control of growth.	EQ	microorganism. Students will use quantitative measures to explain the justification for their identification and the biochemical tests results. Student will be evaluated on their ability to choose best alternatives to their problem solving and reach a conclusion based upon their hypothesis being tested. Students will produce a written report assessing the logic of their answers and evaluated upon the accuracy of their results. Team members will divide tasks and share results equally. Team members will anonymously evaluate the other team members participation and contributions to the final report.
17. Describe evidence for the evolution of cells, organelles, and major metabolic pathways from early prokaryotes and how phylogenetic trees reflect evolutionary relationships.	CT CM	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
18. Describe the causes and consequences of mutations on microbial evolution and the generation of diversity as well as human impacts on adaptation.	CT CM	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
19. Classify interactions of microorganisms on human and non-human hosts as neutral, detrimental, or beneficial.	CT CM	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply

		principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Instruction will be by lecture/discussion with emphasis on student/teacher interaction and cognitive processes.

METHODS OF EVALUATION: Students will be evaluated by written testing of facts, theories, principles, and their application.

The overall final course grade will comprise of 75% of the final lecture grade and 25% of the final lab grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brian Baumgartner	Signature Brian Baumgartner	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Introductory Chemistry I

Prefix and Number: CHEM 1405

Division – Department: Science & Mathematics - Chemistry

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This course is a study of fundamentals of elementary inorganic and organic chemistry. A study is made of a select group of elements and compounds and the chemical laws and principles that govern elementary chemistry. A correlation between Chemistry and other related sciences is made with emphasis placed upon the scientific method of problem solving. This course is designed for a variety of students including those who are majoring in professional nursing and professional agriculture. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Pre-requisite: TSI Complete in math

Co-requisite: Laboratory for CHEM 1405 Introductory Chemistry I

Topical Outline:

The student should be able to use chemical principles, write balanced equations, and perform simple stoichiometric calculations to the degree necessary to successfully progress to the next chemistry course. The overall purpose of this course is to either prepare the student for more difficult chemistry courses and to prepare the student to successfully use chemistry in their field of study.

At a minimum the following topics will be discussed:

- | | |
|--|---|
| 1. Scientific Method | 12. Percent Composition |
| 2. Scientific Notation | 13. Chemical Equations
(writing, balancing, and types) |
| 3. Metric system | 14. Stoichiometry |
| 4. Dimensional Analysis | 15. Limiting Reactants and Percent Yield |
| 5. Mass, Volume, Temperature, Density | 16. Atomic Models (Thompson, Bohr, and Modern) |
| 6. Elements and Compounds | 17. Electron Configurations |
| 7. Nomenclature | 18. Periodic Table |
| 8. Physical and Chemical Changes | 19. Lewis Structures |
| 9. Energy, Heat, and Conservation Laws | 20. Bonding |
| 10. Ions and Isotopes | 21. VSEPR Theory |
| 11. Molecular and Empirical Formulas | |

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Apply scientific theories to analyze data collected in lab and	CT1 CT2	The student will work in small groups to carry out or conduct an

report results in written form.	CT3 CM5 EQ1 EQ3 TW2	experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
2. Convert measurement units and use numerical values in scientific notation to solve problems.	CT2 CT3 EQ3	The student will identify essential information and apply different conversion techniques to solve applicable problems.
3. Use metric measurements in a laboratory setting.	CT3 EQ1 EQ2 EQ3 EQ4 EQ5 TW2	The student will work in a team to make measurements and apply the results to a laboratory experiment. They will make calculations that solve problems showing all steps using the metric system in the lab. Assessment will be based on the results obtained.
4. Solve problems using dimensional analysis and significant figures.	CT2 CT3 EQ3	The student will identify essential information and apply different conversion techniques to solve applicable problems.
5. Measure and distinguish different chemical and physical properties and changes.	CM3 CM5 TW2	The student will work in groups to perform experiments and complete an oral or written presentation distinguishing the different properties where they will be assessed on the accuracy on their findings within the group.
6. Distinguish the characteristics of atoms, isotopes, and ions and write appropriate symbols for each.	CM3 CM5	The student will complete an oral or written presentation that uses the periodic table to identify essential information to write the appropriate symbols on assignments.
7. Use the periodic table to describe properties of atoms, ions, isotopes, and compounds.	CM3 EQ3	The student will complete an oral or written presentation that uses the periodic table and identify essential information to calculate the number of protons, neutrons and electrons in atoms and isotopes.
8. Differentiate between the properties and formulas of ionic and molecular compounds.	CM5	The student will complete an oral or written presentation and be assessed on the accuracy of their work.

9. Differentiate between and write the name and formula for elements, monatomic and polyatomic ions, isotopes, and compounds (ionic, molecular, and acids).	CM5	The student will complete an oral or written presentation and be assessed on the accuracy of their work.
10. Calculate the percent composition for a compound.	CT2 CM5 EQ1 EQ3	The student will complete an oral or written presentation solving a percent composition problem by identifying essential information and providing justification and evaluating the reasonableness of their solution.
11. Solve problems using the mole concept.	CT3 EQ1 EQ2 EQ3 EQ4 EQ5 TW2	The student will work in a team to make measurements and apply the results to a laboratory experiment. They will make calculations that solve problems showing all steps using the metric system in the lab. Assessment will be based on the results obtained.
12. Determine the empirical and molecular formulas from appropriate data.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
13. Calculate quantities associated with solutions.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
14. Write a balanced chemical equation.	CT3 CM5 EQ1 EQ3	The student will complete an oral or written presentation applying the law of conservation of mass to balance a chemical reaction by identifying the essential information given and evaluating the reasonableness of their solution. They will be assessed on their accuracy.
15. Classify, predict products, and describe various chemical reactions (combination, decomposition, single displacement, double displacement, combustion, aqueous, etc.).	CT3 EQ1 TW2	The student will apply lecture and textbook readings to conduct experiments while working in groups or teams and evaluate the reasonableness of the solution. They will be assessed on the results of the experiment.
LAB		
16. Solve stoichiometry problems including limiting reactants and percent yield.	CT2 EQ1 EQ2	The student will identify essential information to solve a problem showing all steps involved and

	EQ3	evaluate the reasonable of the solution.
17. Use energy relationships to calculate the heat change for a chemical reaction.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
18. Describe and calculate properties (wavelength, frequency, and energy) of electromagnetic radiation.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
19. Describe and write the ground state electron configuration for atoms and monatomic ions using appropriate rules and principles.	CT2 CT3 CM5 EQ4	The student will apply lecture notes, textbook readings, and the periodic table to solve an appropriate problem and complete an oral or written presentation which will be assessed on the accuracy of content.
20. Describe and explain periodic trends in ionization energy, atomic radius, and ion size.	CT2 CT3 CM5 EQ4	The student will apply lecture notes, textbook readings, and the periodic table to solve an appropriate problem and complete an oral or written presentation which will be assessed on the accuracy of content.
21. Differentiate and classify between ionic, polar covalent, and nonpolar covalent bonding.	CT2 CT3 CM5 EQ4	The student will apply lecture notes, textbook readings, and the periodic table to solve an appropriate problem and complete an oral or written presentation which will be assessed on the accuracy of content.
22. Draw Lewis formulas for diatomic elements, molecular compounds, and simple polyatomic ions.	CT2 CT3 CM5 EQ4	The student will apply lecture notes, textbook readings, and the periodic table to solve an appropriate problem and complete an oral or written presentation which will be assessed on the accuracy of content.
23. Identify major functional groups found in organic compounds.	CT3 CM5 EQ1 EQ3	The student will complete an oral or written presentation identifying organic compounds. They will identify essential information from the rules of bonding to evaluate the reasonableness of their solutions.
24. Use VSEPR theory to predict	CT2	The student will apply lecture

bond angles and molecular shape of a molecule or polyatomic ion.	CT3 CM5 EQ4	notes, textbook readings, and the periodic table to solve an appropriate problem and complete an oral or written presentation which will be assessed on the accuracy of content.
25. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
26. Demonstrate safe and proper handling of laboratory equipment and chemicals.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
27. Conduct basic laboratory experiments with proper laboratory techniques.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
28. Make careful and accurate experimental observations.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed.

		The student will also be assessed on the synthesis of the project within the group.
29. Relate physical observations and measurements to theoretical principles.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
30. Interpret laboratory results and experimental data, and reach logical conclusions.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.

Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION:

Direct and indirect lecture methods are used. An effort is made to totally involve the students in problem solving and theory discussions.

Laboratory experiments are performed by the students working in pairs.

Problem solving is an extremely important part of the course. Many problems are worked by the instructor and/or the students.

METHODS OF EVALUATION:

4 to 5 tests are designed to test the objectives. These tests constitute 50% of the student's grade.

10 to 14 laboratory exercises are performed by the student. These labs constitute 25% of the total grade.

A final comprehensive exam constitutes 25% of the total grade. A total average grade of 70 is necessary for a passing grade of C.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Michael Felty	Signature Michael Felty	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Introductory Chemistry I (for Allied Health)

Prefix and Number: CHEM 1406

Division – Department: Science & Mathematics - Chemistry

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This course is a study of fundamentals of inorganic chemistry. A study is made of a select group of elements and compounds and the chemical laws and principles that govern elementary chemistry. A correlation between Chemistry and other related sciences is made with emphasis placed upon the scientific method of problem solving. This class is designed for allied health students and for students who are not science majors. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: TSI complete in math

Co-requisite: Laboratory for CHEM 1406 Introductory Chemistry I (for Allied Health)

Topical Outline:

Classifying Matter
Metric System
Scientific Notation
Significant Figures
Atom
Isotopes
Avogadro's Number
Moles

Periodic Table
Electron Configurations
Ionic Bonds
Nomenclature
Covalent Bonds
Molecular Shapes
Types of Chemical
Reactions

Limiting Reactants
Gas Laws
Solution Stoichiometry
Chemical Kinetics
Chemical Equilibrium
Acids and Bases
pH

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<u>LECTURE</u>		
1. Convert measurement units and use numerical values in scientific notation to solve problems.	CT2 CT3 EQ3	The student will identify essential information and apply different conversion techniques to solve applicable problems.
2. Solve problems using dimensional analysis and significant figures.	CT2 CT3 EQ3	The student will identify essential information and apply different conversion techniques to solve applicable problems.
3. Use the periodic table to describe properties of atoms, ions, isotopes, and compounds.	CM3 EQ3	The student will complete an oral or written presentation that uses the periodic table and identify essential information to calculate the number of protons, neutrons and electrons in atoms and isotopes.
4. Solve problems using the mole concept.	CT3 EQ1	The student will work in a team to make measurements and apply the

	EQ2 EQ3 EQ4 EQ5 TW2	results to a laboratory experiment. They will make calculations that solve problems showing all steps using the metric system in the lab. Assessment will be based on the results obtained.
5. Draw Lewis formulas for diatomic elements, molecular compounds, and simple polyatomic ions.	CT2 CT3 CM5 EQ4	The student will apply lecture notes, textbook readings, and the periodic table to solve an appropriate problem and complete an oral or written presentation which will be assessed on the accuracy of content.
6. Differentiate between and write the name and formula for elements, monatomic and polyatomic ions, isotopes, and compounds (ionic, molecular, and acids).	CM5	The student will complete an oral or written presentation and be assessed on the accuracy of their work.
7. Use VSEPR theory to predict bond angles and molecular shape of a molecule or polyatomic ion.	CT2 CT3 CM5 EQ4	The student will apply lecture notes, textbook readings, and the periodic table to solve an appropriate problem and complete an oral or written presentation which will be assessed on the accuracy of content.
8. Write a balanced chemical equation.	CT3 CM5 EQ1 EQ3	The student will complete an oral or written presentation applying the law of conservation of mass to balance a chemical reaction by identifying the essential information given and evaluating the reasonableness of their solution. They will be assessed on their accuracy.
9. Assign oxidation numbers to elements in chemical formulas, and identify the oxidizing and reducing agents in redox reactions.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonableness of the solution.
10. Classify, predict products, and describe various chemical reactions.	CT3 EQ1 TW2	The student will apply lecture and textbook readings to conduct experiments while working in groups or teams and evaluate the reasonableness of the solution. They will be assessed on the results of the experiment.
11. Use the kinetic molecular theory to explain and compare the properties of matter in different states.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonableness of the solution.

		solution.
12. Solve problems using the proper gas law.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
13. Calculate solution concentrations and do stoichiometric calculations.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
14. Do calculations based on colligative properties.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
15. Calculate reaction rates from experimental data.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
16. Write equilibrium expressions based on reaction equations, and do calculations based on equilibrium expressions.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
17. Use Le Chatelier's principle to predict the influence of changes in concentration and reaction temperatures on the position of equilibrium for a reaction	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
18. Write reaction equations that illustrate different types of acids and their reactions with bases and in water.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
19. Solve pH problems.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonable of the solution.
LAB		
20. The student will apply scientific theories to analyze data collected in lab and report results in written form.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will

		be assessed. The student will also be assessed on the synthesis of the project within the group.
21. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
22. Demonstrate safe and proper handling of laboratory equipment and chemicals.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
23. Conduct basic laboratory experiments with proper laboratory techniques.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
24. Make careful and accurate experimental observations.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
25. Relate physical observations and measurements to theoretical principles.	CT1 CT2 CT3 CM5	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An

	EQ1 EQ3 TW2	oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
26. Interpret laboratory results and experimental data, and reach logical conclusions.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
METHODS OF INSTRUCTION:

Direct and indirect lecture methods are used. An effort is made to totally involve the students in problem solving and theory discussions.

Laboratory experiments are performed by the students working in pairs.

Problem solving is an extremely important part of the course. Many problems are worked by the instructor and/or the students.

METHODS OF EVALUATION:

A minimum of 3 exams, one of which may be a comprehensive final exam, testing the objectives is to be given. These assessments must make up at least 50% of the final grade. The final grade must be reflective of the students' understanding of all major topics in the course.

A minimum of 10 laboratory experiments must be performed by the student. These labs must make up at least 20% of the final grade.

No more than 30% of the final grade may be devoted to any other assignment. A total average grade of 70 must be obtained for a grade of C

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Michael Felty	Signature Michael Felty	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Introductory Chemistry II

Prefix and Number: CHEM 1407

Division – Department: Science & Mathematics - Chemistry

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A continuation of Chemistry 1405 with emphasis correlation between Chemistry and other related sciences is made with emphasis placed upon the scientific method of problem solving. This class is designed for allied health students and for students who are not science majors. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Pre-requisite: CHEM 1405 Introductory Chemistry I

Co-requisite: Laboratory for CHEM 1407 Introductory Chemistry II

Topical Outline:

Gas Laws
Phase Diagrams
Intermolecular Forces
Solution Concentration

Colligative Properties
Reaction Rates
Equilibrium Constant
Le Chatelier's Principle

Acids and Bases
pH and pOH

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems.	CT2 CT3 EQ3	The student will identify essential information and apply different conversion techniques to solve applicable problems.
2. State the characteristics of liquids and solids using phase diagrams.	CM5	The student will complete an oral or written presentation and be assessed on the accuracy of their work.
3. Articulate the importance of intermolecular interactions and predict trends in physical properties.	CM5	The student will complete an oral or written presentation and be assessed on the accuracy of their work.
4. Identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships.	CT3 EQ1 EQ2 EQ3 EQ4 EQ5 TW2	The student will work in a team to make measurements and apply the results to a laboratory experiment. They will make calculations that solve problems showing all steps using the metric system in the lab. Assessment will be based on the results obtained.

5. Identify and balance oxidation-reduction equations.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonableness of the solution.
6. Determine the rate of a reaction and its dependence on concentration, time, and temperature.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonableness of the solution.
7. Apply the principles of equilibrium to aqueous systems using LeChatelier's Principle to predict the effects of concentration, pressure, and temperature changes on equilibrium mixtures.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonableness of the solution.
8. Discuss the construction and operation of galvanic and electrolytic electrochemical cells, and determine standard and non-standard cell potentials.	CT2 EQ1 EQ2 EQ3	The student will identify essential information to solve a problem showing all steps involved and evaluate the reasonableness of the solution.
9. Describe basic principles of organic chemistry and descriptive inorganic chemistry.	CT3 CM5 EQ1 EQ3	The student will complete an oral or written presentation identifying organic compounds. They will identify essential information from the rules of bonding to evaluate the reasonableness of their solutions.
LAB		
10. The student will apply scientific theories to analyze data collected in lab and report results in written form.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
11. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the

		project within the group.
12. Demonstrate safe and proper handling of laboratory equipment and chemicals.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
13. Conduct basic laboratory experiments with proper laboratory techniques.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
14. Make careful and accurate experimental observations.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
15. Relate physical observations and measurements to theoretical principles.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
16. Interpret laboratory results and experimental data, and reach logical conclusions.	CT1 CT2 CT3 CM5 EQ1 EQ3	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of

	TW2	content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION:

Direct and indirect lecture methods are used. An effort is made to totally involve the students in problem solving and theory discussions.

Laboratory experiments are performed by the students working in pairs.

Problem solving is an extremely important part of the course. Many problems are worked by the instructor and/or the students.

METHODS OF EVALUATION:

A minimum of 3 exams, one of which may be a comprehensive final exam, testing the objectives is to be given. These assessments must make up at least 50% of the final grade. The final grade must be reflective of the students' understanding of all major topics in the course.

A minimum of 10 laboratory experiments must be performed by the student. These labs must make up at least 20% of the final grade.

No more than 30% of the final grade may be devoted to any other assignment. A total average grade of 70 must be obtained for a grade of C

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Michael Felty	Signature Michael Felty	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: General Chemistry I

Prefix and Number: CHEM 1411

Division – Department: Science & Mathematics - Chemistry

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Fundamental principles of chemistry for majors in the sciences, health sciences, and engineering; topics include measurements, fundamental properties of matter, states of matter, chemical reactions, chemical stoichiometry, periodicity of elemental properties, atomic structure, chemical bonding, molecular structure, solutions, properties of gases, and an introduction to thermodynamics and descriptive chemistry. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: MATH 1414 College Algebra or equivalent academic preparation
Co-requisite: Laboratory for CHEM 1411 General Chemistry I

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Define the fundamental properties of matter.	CT2 EQ1	<p>Work to develop an oral or written presentation to solve homework and/or test problems involving the properties of matter in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
2. Classify matter, compounds, and chemical reactions.	CT3 EQ1	<p>Work to develop an oral or written presentation to solve homework and/or test problems involving matter, compounds and chemical reactions in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group</p>

		completed the problem.
3. Determine the basic nuclear and electronic structure of atoms.	CT2 EQ4	<p>Work to develop an oral or written presentation to present an argument providing justification or solve homework and/or test problems involving the basic nuclear and electronic structure of atoms pH in which essential information is identified to solve a problem or present an argument providing justification for their solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem</p>
4. Identify trends in chemical and physical properties of the elements using the Periodic Table.	CT3 CM2 EQ5	<p>Work to develop an oral or written presentation to solve homework, lab and/or test problems involving the periodic trends reactions in which essential information is identified to connect and apply the learning objective to a new situation and to reach a conclusion based upon the hypothesis or problem being tested.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
5. Describe the bonding in and the shape of simple molecules and ions.	CT2 EQ3	<p>Work to develop an oral or written presentation to present an argument providing justification or solve homework and/or test problems involving chemical bonding and basic molecular shapes pH in which essential information is identified to solve a problem or present an argument providing justification for their solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
6. Solve Stoichiometric problems.	CT2 EQ1	<p>Work to develop an oral or written presentation to solve homework, lab or test problems involving stoichiometric calculations and</p>

		<p>chemical reactions in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem. .</p>
7. Write chemical formulas.	CT3 EQ1	<p>Work to develop an oral or written presentation to solve homework, lab or test problems involving the formulas of chemical compounds in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
8. Write and balance equations.	CT3 EQ1	<p>Work to develop an oral or written presentation to solve homework, lab or test problems involving the formulas of chemical compounds in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
9. Use the rules of nomenclature to name chemical compounds.	CT3 CM2 EQ5	<p>Work to develop an oral or written presentation to solve homework, lab or test problems involving chemical nomenclature reactions in which essential information is identified to connect and apply the learning objective to a new situation and to reach a conclusion based upon the hypothesis or problem being tested.</p> <p>Assessment will be based on the accuracy or depth of content and</p>

		whether the team or group completed the problem.
10. Define the types and characteristics of chemical reactions.	CT3 EQ3	<p>Work to develop an oral or written presentation to solve homework, lab or test problems involving the types of chemical reactions in which essential information is identified to solve a problem or conduct an experiment.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
11. Use the gas laws and basics of the Kinetic Molecular Theory to solve gas problems.	CT2 EQ4	<p>Work to develop an oral or written presentation to present an argument providing justification or solve homework and/or test problems involving the KM Theory to make informed decisions regarding interpretation of data.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
12. Determine the role of energy in physical changes and chemical reactions.	CT2 EQ5	<p>Work to develop an oral or written presentation to solve homework, lab or test problems involving energy of physical/chemical changes which required students to reach a conclusion based on the hypothesis or problem being tested.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
13. Convert units of measure and demonstrate dimensional analysis skills.	CT2 EQ4	<p>Work to develop an oral or written presentation to present an argument providing justification or solve homework, lab or test problems involving dimensional analysis and units of measure.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>

<u>LAB</u>		
<p>14. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.</p>	<p>CT1 EQ1</p>	<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Safely perform lab experiments in groups of 2 to 4 students.</p> <p>Complete laboratory handouts, including data tables, and report results in written laboratory reports.</p> <p>Reports will be evaluated on several criteria, which include proper format and accuracy of results.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
<p>15. Demonstrate safe and proper handling of laboratory equipment and chemicals.</p>	<p>CT5 EQ1</p>	<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Safely perform lab experiments in groups of 2 to 4 students.</p> <p>Participation of each student in the lab experiment, including data collection, will be required.</p> <p>Student will be required to analyze data and relate results to theory discussed in lecture.</p> <p>Assessment will be based on the</p>

		accuracy or depth of content and whether the team or group completed the problem.
16. Conduct basic laboratory experiments with proper laboratory techniques.	CT1 CM2 TW1,2	<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Safely perform lab experiments in groups of 2 to 4 students.</p> <p>Participation of each student in the lab experiment will be required.</p> <p>Student will be required to analyze data and relate results to theory discussed in lecture.</p> <p>Assessment will be based on the accuracy or depth of content/synthesis of the final project or performance and whether the team or group completed the problem.</p>
17. Make careful and accurate experimental observations.	CT3 EQ4	<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Perform lab experiments in groups of 2 to 4 students.</p> <p>Participation of each student in the data collection will be required. Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
18. Relate physical observations and measurements to	CT1 CM3	The student will work in a small team or group to develop an oral

theoretical principles.	EQ3	<p>or written presentation solving a problem or carrying out an experiment in which essential information is identified to verify and/or evaluate the reasonableness of the solution.</p> <p>Answer lab experiment questions relating the experimental results to the theory discussed in lecture.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
19. Interpret laboratory results and experimental data, and reach logical conclusions.	CT2 EQ4,5	<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to make informed decisions regarding interpretation of data.</p> <p>Relate textbook information to the results of experiments by submitting written laboratory reports.</p> <p>Answer lab experiment questions relating the experimental results to the theory discussed in lecture.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
20. Record experimental work completely and accurately in laboratory notebooks and communicate experimental results clearly in written reports.	CT1 CM5	<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to assess the accuracy and/or depth of the report.</p> <p>Perform lab experiments. Participation in the data collection and recording will be required.</p> <p>Answer lab experiment questions relating the experimental results to</p>

		<p>the theory discussed in lecture.</p> <p>Relate textbook information to the results of experiments by submitting written laboratory reports.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
21. Design fundamental experiments involving principles of chemistry.	CT1 CM	<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to assess the accuracy and/or depth of content of the presentation.</p> <p>Investigate a current event related to chemical principles.</p> <p>Student will be required to analyze data and relate results to theory discussed in lecture.</p> <p>After analysis a written report will be submitted and be evaluated on several criteria, which include proper format, relevance, thoroughness and accuracy.</p> <p>Assessment will be based on the accuracy or depth of content/synthesis of the final project or performance and whether the team or group completed the problem.</p>
22. Identify appropriate sources of information for conducting laboratory experiments involving principles of chemistry.	EQ1 TW2	<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Relate textbook information to the results of experiments on by</p>

		submitting written laboratory reports. Assessment will be based on the accuracy or depth of content/synthesis of the final project or performance and whether the team or group completed the problem.
Before the semester begins, contact your division chair for specific details concerning the assignment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Direct and indirect lecture methods are used. An effort is made to totally involve the student in problem solving and theory discussions. Laboratory experiments are performed by the students working in pairs. Problem solving is an extremely important part of the course. Many problems are worked by the instructor and/or the students.

METHODS OF EVALUATION:

4-5 tests are designed to test the objectives. These tests constitute 50% of the student's grade.

10-14 laboratory exercises are performed by the student. These labs constitute 25% of the total grade.

A final comprehensive exam constitutes 25% of the total grade. A total average grade of 70 is necessary for a passing grade of C.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Michael Felty	Signature Michael Felty	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: General Chemistry II

Prefix and Number: CHEM 1412

Division – Department: Science & Mathematics - Chemistry

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A continuation of CHEM 1411 with topics covering Chemical equilibrium; phase diagrams and spectrometry; acid-base concepts; thermodynamics; kinetics; electrochemistry; nuclear chemistry; an introduction to organic chemistry and descriptive inorganic chemistry. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: CHEM 1411 General Chemistry I

Co-requisite: Laboratory for CHEM 1412 General Chemistry II

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. State the characteristics of liquids and solids, including phase diagrams and spectrometry.	CT3 EQ1,4	Work to develop an oral or written presentation to solve homework and/or test problems involving properties of liquids/solids, phase diagrams and spectrometry in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution. Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.
2. Articulate the importance of intermolecular interactions and predict trends in physical properties.	CT2 CM4	Work to develop an oral or written presentation to present an argument providing justification or solve homework, lab and/or test problems involving IM forces and periodic trends in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.

		Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.
3. Identify the characteristics of acids, bases, and salts, and solve problems based on their quantitative relationships.	CT2 EQ1	<p>Work to develop an oral or written presentation to present an argument providing justification or solve homework, lab and/or test problems involving acids/bases, etc. including molarity and pH in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
4. Identify and balance oxidation-reduction equations, and solve redox titration problems.	CT2 EQ1	<p>work to develop an oral or written presentation to present an argument providing justification or solve homework, lab or test problems involving redox reactions, including stoichiometric calculations for titrations in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
5. Determine the rate of a reaction and its dependence on concentration, time, and temperature.	CT2 EQ4	<p>Work to develop an oral or written presentation to present an argument providing justification or solve homework, lab or test problems involving rates of reactions and the main factors that influence chemical reactions in which essential information is identified to for solving a problem or conducting an experiment.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>

6. Apply the principles of equilibrium to aqueous systems using LeChatelier's Principle to predict the effects of concentration, pressure, and temperature changes on equilibrium mixtures.	CT3 EQ5	<p>Work to develop an oral or written presentation to solve homework and/or test problems involving LeChatelier's Principle and the main factors that influence reversible chemical reactions in which essential information is identified to connect and apply the learning objective to a new situation and to reach a conclusion based upon the hypothesis or problem being tested.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
7. Analyze and perform calculations with the thermodynamic functions, enthalpy, entropy, and free energy.	CT2 EQ4	<p>Work to develop an oral or written presentation to present an argument providing justification or solve homework, lab and/or test problems involving basic thermodynamic functions such as enthalpy, entropy and Gibbs free energy in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
8. Discuss the construction and operation of galvanic and electrolytic electrochemical cells, and determine standard and non-standard cell potentials.	CT5 EQ1	<p>Solve homework, lab and/or test problems involving galvanic and/or electrolytic cells, standard and nonstandard electrode potentials in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem..</p>
9. Define nuclear decay processes.	CT3 EQ3	<p>Work to develop an oral or written presentation to solve homework, lab and/or test problems involving first order nuclear decay and the main radioactive decay processes in which</p>

		<p>essential information is identified for solving a problem or conducting an experiment.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
10. Describe basic principles of organic chemistry and descriptive inorganic chemistry.	CT3 EQ1	<p>Work to develop an oral or written presentation to solve homework, lab and/or test problems involving organic and inorganic chemistry to verify or evaluate the reasonableness of the solution.</p> <p>Analyze simple hydrocarbons and basic functional group families.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
<u>LAB</u>		
11. Use basic apparatus and apply experimental methodologies used in the chemistry laboratory.	CT1 EQ1	<p>Work in a small team or group to safely perform lab experiments in groups of 2 to 4 students.</p> <p>Complete laboratory handouts, including data tables, and report results in written laboratory reports.</p> <p>Reports will be evaluated on several criteria, which include proper format and accuracy of results.</p> <p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
12. Demonstrate safe and proper handling of laboratory equipment and chemicals	CT5 EQ1	<p>Work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the</p>

		<p>solution.</p> <p>Safely perform lab experiments in groups of 2 to 4 students.</p> <p>Participation of each student in the lab experiment, including data collection, will be required.</p> <p>Student will be required to analyze data and relate results to theory discussed in lecture.</p> <p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
13. Conduct basic laboratory experiments with proper laboratory techniques.	CT1 CM2 TW1,2	<p>Work in a small team or group to safely perform lab experiments in groups of 2 to 4 students.</p> <p>Participation of each student in the lab experiment will be required.</p> <p>Student will be required to analyze data and relate results to theory discussed in lecture.</p> <p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content or the final project or performance and whether the team or group completed the problem.</p>
14. Make careful and accurate experimental observations.	CT3 EQ4	<p>Develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to</p>

		<p>connect and apply the learning objective to a new situation and verify or evaluate the reasonableness of the solution.</p> <p>Perform lab experiments in groups of 2 to 4 students.</p> <p>Participation of each student in the data collection will be required.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
15. Relate physical observations and measurements to theoretical principles.	CT1 CM3 EQ3	<p>Answer lab experiment questions relating the experimental results to the theory discussed in lecture.</p> <p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified for solving a problem or conducting an experiment.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
16. Interpret laboratory results and experimental data, and reach logical conclusions.	CT2 EQ4,5	<p>Work in a small team or group to relate textbook information to the results of experiments by submitting written laboratory reports.</p> <p>Answer lab experiment questions relating the experimental results to the theory discussed in lecture.</p> <p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective reach a conclusion based upon the hypothesis or problem being tested.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
17. Record experimental work completely and accurately in laboratory notebooks and	CT1 CM5	<p>Work in a small team or group to perform lab experiments.</p> <p>Participation in the data collection</p>

communicate experimental results clearly in written reports.		<p>and recording will be required.</p> <p>Answer lab experiment questions relating the experimental results to the theory discussed in lecture.</p> <p>Relate textbook information to the results of experiments by submitting written laboratory reports.</p> <p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content of the presentation and whether the team or group completed the problem.</p>
18. Design fundamental experiments involving principles of chemistry and chemical instrumentation.	CT1 CM	<p>Work in a small team or group to investigate a current event related to chemical principles.</p> <p>Student will be required to analyze data and relate results to theory discussed in lecture.</p> <p>After analysis and evaluation a written report will be submitted and be evaluated on several criteria, which include proper format, relevance, thoroughness and accuracy.</p> <p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content and whether the team or group completed the problem.</p>
19. Identify appropriate sources of information for conducting laboratory experiments involving principles of	EQ1 TW2	<p>Work in a small team or group to relate textbook information to the results of experiments on by submitting written laboratory reports.</p>

chemistry.		<p>The student will work in a small team or group to develop an oral or written presentation solving a problem or carrying out an experiment in which essential information is identified to connect and apply the learning objective to a new situation and evaluating the reasonableness of the solution.</p> <p>Assessment will be based on the accuracy or depth of content/synthesis of the final project or performance and whether the team or group completed the problem.</p>
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Direct and indirect lecture methods are used. An effort is made to totally involve the student in problem solving and theory discussions. Laboratory experiments are performed by the students working in pairs. Problem solving is an extremely important part of the course. Many problems are worked by the instructor and/or the students.

METHODS OF EVALUATION: 4-5 tests are designed to test the objective. These tests constitute 50% of the student's grade. 10-14 laboratory exercises are performed by the student. These labs constitute 25% of the total grade. A final comprehensive exam constitutes 25% of the total grade. A total average grade of 70 is necessary for a passing grade of C.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Michael Felty	Signature Michael Felty	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Organic Chemistry I

Prefix and Number: CHEM 2423

Division – Department: Science & Mathematics - Chemistry

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Fundamental principles of organic chemistry will be studied, including the structure, bonding, properties, and reactivity of organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: CHEM 1412 General Chemistry II

Co-requisite: Laboratory for CHEM 2423 Organic Chemistry I

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Classify organic compounds by structure, molecular orbitals, hybridization, resonance, tautomerism, polarity, chirality, conformation, and functionality.	CT2,5 CM2 ESQ1,2,3	Solve pop test and unit test involving structures listed in these objectives. Analyze and identify essential structure information for each type of compound. Evaluate and compare the different concepts .
2. Identify organic molecules using appropriate organic nomenclature.	CT2 EQ3	Solve pop test and unit tests naming these molecules Or given the structure be able to name the molecule.
3. Describe the principle reactions for syntheses of molecules, ions, and radicals.	EQ1,2,3	Solve pop test of unit test problems naming and illustrating the reactions
4. Describe organic reactions in terms of radical and ionic mechanisms.	EQ1,2,3	Solve pop test and unit test problems using the mechanisms.
5. Describe the use of spectroscopic data to determine the structure of organic molecules.	EQ1,3,4,5	Analyze an IR spectrum to solve the compound illustrated
6. Formulate appropriate reaction conditions for the synthesis of simple organic molecules.	EQ1-5	Solve a pop test or unit test that requires how to form different complex molecules from simple molecules.

LAB		
7. Perform chemical experiments, analysis procedures, and waste disposal in a safe and responsible manner.	CM3 TW1,3	Students will perform lab experiments in groups of 2 to 4 students. Participation by each student in the data collection will be required. Students will be required to record, analyze and related data results to theory discussed in the lecture data
8. Utilize scientific tools such as glassware and analytical instruments to collect and analyze data.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
9. Identify and utilize appropriate separation techniques such as distillation, extraction, and chromatography to purify organic compounds.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
10. Record experimental work completely and accurately in laboratory notebooks, and communicate experimental results clearly in written reports.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be

		evaluated on for participation, synthesis of work and sharing work.
11. Demonstrate a basic understanding of stereochemistry.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
12. Classify organic compounds by structure, molecular orbitals, hybridization, resonance, tautomerism, polarity, chirality, conformation, functionality in laboratory reports.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
13. Identify organic molecules using appropriate organic nomenclature in laboratory reports.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
14. Perform organic syntheses of molecules.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given.

		The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
15. Describe organic reactions in terms of radical and ionic mechanisms in laboratory reports.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
16. Use spectroscopic data to determine the structure of organic molecules.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
17. Formulate appropriate reaction conditions for the synthesis of simple organic molecules.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and

		accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Direct and indirect lecture methods are used. An effort is made to totally involve the student in problem solving and theory discussions. Laboratory experiments are performed by the students working in pairs. Problem solving is an extremely important part of the course. Many problems are worked by the instructor and/or the students.

METHODS OF EVALUATION: 4-5 tests are designed to test the objective. These tests constitute 50% of the student's grade. 10-14 laboratory exercises are performed by the student. These labs constitute 25% of the total grade. A final comprehensive exam constitutes 25% of the total grade. A total average grade of 70 is necessary for a passing grade of C.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Michael Felty	Signature Michael Felty	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Organic Chemistry II

Prefix and Number: CHEM 2425

Division – Department: Science & Mathematics - Chemistry

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Advanced principles of organic chemistry will be studied, including the structure, properties, and reactivity of aliphatic and aromatic organic molecules; and properties and behavior of organic compounds and their derivatives. Emphasis is placed on organic synthesis and mechanisms. Includes study of covalent and ionic bonding, nomenclature, stereochemistry, structure and reactivity, reaction mechanisms, functional groups, and synthesis of simple molecules. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: CHEM 2423 Organic Chemistry I

Co-requisite: Laboratory for CHEM 2425 Organic Chemistry II

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Correlate molecular structure with physical and chemical properties of aliphatic and aromatic organic molecules.	CM2,4 EQ4,5	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
2. Predict the mechanism and outcome of aliphatic and aromatic substitution and elimination reactions, given the conditions and starting materials.	CM2,4 EQ3,5	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.

3. Predict the chirality of reaction products based on enantiomeric and diastereomeric relationships.	EQ3-5	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
4. Describe reaction mechanisms in terms of energetics, reaction kinetics, and thermodynamics.	CM1 EQ3,4	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
5. Use spectroscopic techniques to characterize organic molecules and subgroups.	CM3,4 EQ4	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
LAB		
6. Perform chemical experiments, analysis procedures, and waste disposal in a safe and responsible manner.	CM3 TW1,3	Students will perform lab experiments in groups of 2 to 4 students. Participation by each student in the data collection will be required. Students will be required to record, analyze and related data results to theory discussed in the lecture data

7. Utilize scientific tools such as glassware and analytical instruments to collect and analyze data.	EQ TW13	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
8. Identify and utilize appropriate separation techniques such as distillation, extraction, and chromatography to purify organic compounds.	EQ TW2	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
9. Record experimental work completely and accurately in laboratory notebooks, and communicate experimental results clearly in written reports.	CT EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
10. Correlate molecular structure with physical and chemical properties of aliphatic and aromatic organic molecules.	CM2,4, EQ5 TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and

		accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
11. Predict the mechanism and outcome of aliphatic and aromatic substitution and elimination reactions, given the conditions and starting materials.	EQ TW3	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
12. Predict the chirality of reaction products based on enantiomeric and diastereomeric relationships.	CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
13. Describe reaction mechanisms in terms of energetics, reaction kinetics, and thermodynamics.	EQ TW2	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
14. Use spectroscopic techniques to characterize organic molecules and subgroups.	CM EQ TW2	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make

		corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Direct and indirect lecture methods are used. An effort is made to totally involve the student in problem solving and theory discussions. Laboratory experiments are performed by the students working in pairs. Problem solving is an extremely important part of the course. Many problems are worked by the instructor and/or the students.

METHODS OF EVALUATION: 4-5 tests are designed to test the objective. These tests constitute 50% of the student's grade. 10-14 laboratory exercises are performed by the student. These labs constitute 25% of the total grade. A final comprehensive exam constitutes 25% of the total grade. A total average grade of 70 is necessary for a passing grade of C.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Michael Felty	Signature Michael Felty	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Introduction to Theater

Prefix and Number: DRAM 1310

Division – Department: Speech & Fine Arts - Drama

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Survey of theater including its history, dramatic works, stage techniques, production procedures, and relation to other art forms. Participation in productions may be required.

Prerequisites/Co-requisites:

None

Topical Outline:

Unit 1: The Nature of the Theatre

Unit 2: Elements of Theatre

Unit 3: How to an Involved Audience Member

Unit 4: The Role of the Playwright

Unit 5: Creating Dramatic Characters

Unit 6: Critiquing Stage Performance

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Analyze theater through written responses to play texts and/or live performance.	CM	Students will complete an oral or written critique that identifies the components of theater with the main topics of the presentation.
2. Demonstrate a basic knowledge of theater history and dramatic works.	CM	Students will complete an oral or written presentation that focuses on a dramatic work performed during a specified time period.
3. Describe the collaborative nature of theater arts.	TW CM	Students will identify with the various individuals and groups responsible for all aspects stage performances and describe the various responsibilities fulfilled.
4. Explain the relationship of theater to society as it relates to his/her perspective.	SR	Non-mimetic critique, Play critique
5. Develop criteria for accessing a theater productions effectiveness	CT	Students will make connections between the various theater practitioners utilized in a theatre

		production and present an argument for how effective they were in unifying the production by writing a formal critique of the production.
6. Recognize the perspectives and forms of drama	CM	Students will complete an oral or written critique that accesses the connection of content with the main topics of the presentation.
7. Understand the role of the different theatre practitioners	TW	Students will work in groups of two to four and conceptualize a theater production of the instructor's choice. The students will be assessed on the synthesis of the final project and performance within the group.
8. Explain the role of theatre in society	SR	Non-mimetic critique, Play critique
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
METHODS OF EVALUATION:

25% Class Participation
15% Papers, Worksheets, Quizzes over assigned readings
10% Attendance at live performances
20% Project
30 % Exams
100% Total

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Director of Performance Studies Craig Lee	Signature Craig Lee	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Introduction to Cinema

Prefix and Number: DRAM 2366

Division – Department: Speech & Fine Arts - Drama

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Survey and analysis of cinema including history, film techniques, production procedures, selected motion pictures, and cinema's impact on and reflection of society.

Prerequisites/Co-requisites:

None

Topical Outline:

Unit 1: Introduction to Film Analysis
Unit 2: Narrative Structure
Unit 3: Mise en Scene
Unit 4: Cinematography
Unit 5: Acting
Unit 6: Social Context
Unit 7: Genre
Unit 8: Documentary

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Analyze film through written response.	CM	Students will complete an oral or written critique that identifies the components of theater with the main topics of the presentation.
2. Demonstrate a basic knowledge of film history and dramatic works.	CM	Students will complete an oral or written presentation that focuses on a dramatic work performed during a specified time period.
3. Describe the collaborative nature of cinema and the many jobs required to develop a motion picture.	TW CM	Students will identify with the various individuals and groups responsible for all aspects stage performances and describe the various responsibilities fulfilled.
4. Explain the relationship of cinema to society as it relates to his/her perspective.	SR	Non-mimetic critique, Play critique

5. Develop criteria for judging a film's effectiveness	CT	Students will make connections between the various film practitioners utilized in a film production and present an argument for how effective they were in unifying the elements by writing a formal critique of the production.
6. Examine the film industry as an art form and a creative expression;	CM	Students will complete an oral or written critique that accesses the connection of content with the main topics of the presentation.
7. Demonstrate a knowledge of the contributions of contemporary filmmakers;	TW	Students work in groups of two to four and will conduct a social/comparative analysis of a film director's work. The students will be assessed on the synthesis of the final project and performance within the group.
8. Examine the major social, technological, and economic considerations in the development of the film industry.	SR	Students will use their new academic skills/knowledge to share their opinions of the major societal shifts, technical innovation and economic considerations of the film industry by writing a critique of the films.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF INSTRUCTION:

METHODS OF EVALUATION:

Exams	30%
Critiques	40 %
Papers	20 %
<u>Research Project</u>	<u>10 %</u>
Total Possible	100%

The course grade is comprised of performance on quizzes, written class assignments, and tests.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
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Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Director of Performance Studies Craig Lee	Signature Craig Lee	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Principles of Macroeconomics

Prefix and Number: ECON 2301

Division – Department: Social Sciences - Economics

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

An analysis of the economy as a whole including measurement and determination of Aggregate Demand and Aggregate Supply, national income, inflation, and unemployment. Other topics include international trade, economic growth, business cycles, and fiscal policy and monetary policy.

Prerequisites/Co-requisites:

None

Topical Outline:

1. Understanding economics as a study of scarcity
 - A. What is economics?
 - B. How to work with diagrams
 - C. Economics as a major
 - D. The economic activities of producing and trading
 - E. The theories of supply and demand
 - F. Practical application of the supply and demand theory
2. Fundamental of macroeconomics
 - A. Measurements of the macroeconomy: prices and unemployment
 - B. Measurements of the macroeconomy: GDP and Real GDP
3. Macroeconomic stability, instability and fiscal policy
 - A. Aggregate demand and aggregate supply
 - B. The self-regulating economy
 - C. Economic instability and a critique of the self-regulating economy
 - D. The federal budget and fiscal policy
4. Money and the economy and monetary policy
 - A. Understanding money and banking
 - B. The Federal Reserve System
 - C. Money and the economy
 - D. Monetary policy
5. Expectations and economic growth
 - A. Expectations theory and the economy
 - B. Economic growth

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Explain the role of scarcity, specialization, opportunity cost and cost/benefit analysis in economic decision-making.	CT CM EQ SR	<p>Students will be required to work individually and in groups to solve problems.</p> <p>Students will be required to read various economic related articles and present oral summaries and critiques to the class.</p> <p>Students will be required to attend various city, county, or college board meetings.</p>
2. Identify the determinants of supply and demand; demonstrate the impact of shifts in both market supply and demand curves on equilibrium price and output.	CT CM EQ SR	<p>Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.</p>
3. Define and measure national income and rates of unemployment and inflation.	CT CM EQ SR	<p>Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.</p>
4. Identify the phases of the business cycle and the problems caused by cyclical fluctuations in the market economy.	CT CM EQ SR	<p>Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content,</p>

		logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
5. Define money and the money supply; describe the process of money creation by the banking system and the role of the central bank.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
6. Construct the aggregate demand and aggregate supply model of the macro economy and use it to illustrate macroeconomic problems and potential monetary and fiscal policy solutions.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
7. Explain the mechanics and institutions of international trade and their impact on the macro economy.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
8. Define economic growth and identify sources of economic growth.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a

		new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
9. To become familiar and comfortable with common economic labels, terms, laws and concepts.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
10. To recognize the use of economic theory in decision making, problem solving, and predicting economic situations.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
11. To become aware of the political influences on our economy and the economic influences on our politics.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
12. To recognize and accept your	CT	Students will prepare a written

role as a citizen within a global, national, and local community.	CM EQ SR	reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
13. To develop a strategy for reading more complex materials.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF INSTRUCTION: Instruction will be by lecture, group work, computer application and discussions, with emphasis on student- teacher interaction.

METHODS OF EVALUATION: Students will be evaluated by major exams including a final exam. Individual instructors will determine additional assignments including such activities as research papers, projects, article summaries, presentations, homework assignments, and quizzes.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
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Prepared by Mike Peek	Signature Mike Peek	Date Fall 2013
Division Chair David Loper	Signature David Loper	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Principles of Microeconomics

Prefix and Number: ECON 2302

Division – Department: Social Sciences - Economics

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Analysis of the behavior of individual economic agents, including consumer behavior and demand, producer behavior and supply, price and output decisions by firms under various market structures, factor markets, market failures, and international trade.

Prerequisites/Co-requisites:

None

Topical Outline:

1. Microeconomic fundamentals
 - A. Elasticity
 - B. Consumer choice: Utility maximizing and behavioral economics
2. Market structures and policies
 - A. Perfect competition
 - B. Monopoly
 - C. Monopolistic competition, oligopolies and game theory
 - D. Government and product markets: anti-trust and regulation
3. Factor markets and related micro issues
 - A. Factor markets with emphasis on the labor market
 - B. Wages, unions and labor
 - C. Poverty and the distribution of income
 - D. Interest, rent and profit
4. Market failure and public choice
 - A. Market failures: externalities, public goods and asymmetric information
 - B. Public choice: economic theory applied to politics
5. International economics and globalization
 - A. International trade
 - B. International finance
 - C. Globalization

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Explain the role of scarcity, specialization, opportunity cost and cost/benefit analysis in economic decision-making.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
2. Identify the determinants of supply and demand; demonstrate the impact of shifts in both market supply and demand curves on equilibrium price and output.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
3. Summarize the law of diminishing marginal utility; describe the process of utility maximization.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
4. Calculate supply and demand elasticities, identify the determinants of price elasticity of demand and supply, and demonstrate the relationship between elasticity and total revenue.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions.

		Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
5. Describe the production function and the Law of Diminishing Marginal Productivity; calculate and graph short-run and long-run costs of production.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
6. Identify the four market structures by characteristics; calculate and graph the profit maximizing price and quantity in the output markets by use of marginal analysis.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
7. Determine the profit maximizing price and quantity of resources in factor markets under perfect and imperfect competition by use of marginal analysis.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
8. Describe governmental efforts to address market failure such as monopoly power,	CT CM EQ	Students will prepare a written reflection paper analyzing the data given and answering questions

externalities, and public goods.	SR	given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
9. Identify the benefits of free trade using the concept of comparative advantage.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
10. To become familiar and comfortable with common economic labels, terms, laws and concepts as they relate to markets, industries and individual products and services.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
11. Recognize the use of economic theory in decision making, problem solving, and predicting economic and business environments.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying

		skills in a real world setting.
12. Become aware of the political influences on our economy and the economic influences on our politics.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
13. Become aware of the economic conditions and circumstances of our fellow citizens and of the people of other nations.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
14. Recognize and accept your role as a citizen within a global, national and local community.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
15. Become conscious of economic influences on our social institutions and our personal values.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content,

		logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
16. Develop a strategy for reading more complex materials.	CT CM EQ SR	Students will prepare a written reflection paper analyzing the data given and answering questions given. The questions will solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Instruction will be by lecture/group activities/ application/discussion, with emphasis on student- teacher interaction.

METHODS OF EVALUATION: Students will be evaluated through a series of exams including a final exam. Individual instructors will determine the need for additional evaluation through such as requirements as research papers or projects, quizzes, article summaries and presentations, and out of class assignments.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Mike Peek	Signature Mike Peek	Date Fall 2013
Division Chair David Loper	Signature David Loper	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: Learning Frameworks

Prefix and Number: PSYC 1300

Division – Department: Social Sciences - Psychology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned.

Prerequisites/Co-requisites:

None

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Develop a personal code of ethics	CT CM SR	Discussions and writing assignments or class presentation that provides in-depth analysis of one theory of learning. Writings and/or presentation will be evaluated for depth of analysis as well as grammatical and syntax accuracy.
2. Manage time more efficiently	SR EQS?	Discussions and writing assignments or class presentation that provides in-depth analysis of one theory of cognition. Writings and/or presentation will be evaluated for depth of analysis as well as grammatical and syntax accuracy.
3. Improve ability to recall information	CT CM	Discussions and writing assignments or class presentation that provides in-depth analysis of one theory of motivation. Writings and/or presentation will be evaluated for depth of analysis as well as grammatical and syntax accuracy.
4. Read a textbook with improved retention; prepare	CM SR	Select various assessment instruments to measure individual

for and take tests; take effective notes; use technology in the college setting		student learning style and provide statistical analysis of common strengths and weaknesses. Conduct assessment on three outside individuals, providing them with strategies for improving upon weaknesses and enhancing strengths.
5. Set goals through the process of self-discovery	CT CM	
6. Engage in personal assessment activities; collect information used for a personal student learning profile	EQS	
7. Report in writing and verbally on college career and research	CM	
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: The course grade will be determined by a combination of assignments, tests, and projects.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Wendy Mays	Signature Wendy Mays	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Composition I

Prefix and Number: ENGL 1301

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Intensive study of and practice in writing processes, from invention and researching to drafting, revising, and editing, both individually and collaboratively. Emphasis on effective rhetorical choices, including audience, purpose, arrangement, and style. Focus on writing the academic essay as a vehicle for learning, communicating, and critical analysis.

Prerequisites/Co-requisites:

Pre-requisite: TSI complete in Reading and Writing

Topical Outline:

Summary
Narration
Argumentation
Compare/Contrast
Definition
Process/Analysis
Illustration
Research
Synthesis

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate knowledge of individual and collaborative writing processes.	CT CM TW PR	Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.

2. Develop ideas with appropriate support and attribution.	CT CM	After reading an assigned professionally written essay, TLW create a written response that identifies the learner's agreement to or objection to the piece by utilizing specific evidence without the use of fallacies.
3. Write in a style appropriate to audience and purpose.	CM	Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
4. Read, reflect, and respond critically to a variety of texts.	CT	Students will work in groups to prepare a written report analyzing the data given and answering questions given.
5. Use Edited American English in academic essays.	CM	Papers will be graded for mechanics, structure, content, logic and accuracy.
6. Recognize various types and purposes of writing.	CT	Students will work in groups to prepare a written report analyzing the data given and answering questions given.
7. Identify a purpose and compose main ideas for a personal essay.	PR	Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.
8. Perform pre-writing activities that will contribute to the effectiveness of an essay.	CM	In an effort to produce more thoughtful and well organized essays , TLW will be required to complete and submit proof of prewriting for each essay that is written during the course of the semester. These prewriting activities may include interviews, brainstorming, lists, mapping, note taking, etc.
9. Develop ideas thoroughly with details and examples.	CT	Students will work in groups to prepare a written report analyzing the data given and answering questions given.
10. Revise to improve content; edit to make writing conform to Edited American English; and proofread.	PR	Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.

11. Identify the purposes and main ideas of other people's writing.	CT	Students will work in groups to prepare a written report analyzing the data given and answering questions given.
12. Evaluate other people's writings, using the criteria of unity, coherence, adequate development, and logical organization.	TW	Using a teacher generated tool such as a rubric or checklist, TLW complete multiple peer evaluations of essays during the course of the semester.
13. Identify and use the various resources of the library; begin the process of using other people's words and ideas legitimately, using MLA documentation style (see p. 390, A Writer's Reference).	CT CM PR	After completing a unit on library research (including the use of TVCC library databases) as well as MLA guidelines and plagiarism, TLW create and develop an argument essay that incorporates (synthesis) a minimum of 3 outside sources to substantiate the student's claim and that is free of plagiarism as evident by the inclusion of parenthetical citations as well as a Works Cited page.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION:

METHODS OF EVALUATION: Students will write a minimum of five essays and exams according to the policy of the individual instructor. The departmental rubric will stand as a basis for scoring.

Each paper will be averaged equally on a 0-100 point scale.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Amy Rogers	Signature Amy Rogers	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Composition II

Prefix and Number: ENGL 1302

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Intensive study of and practice in the strategies and techniques for developing research-based expository and persuasive texts. Emphasis on effective and ethical rhetorical inquiry, including primary and secondary research methods; critical reading of verbal, visual, and multimedia texts; systematic evaluation, synthesis, and documentation of information sources; and critical thinking about evidence and conclusion.

Prerequisites/Co-requisites:

Prerequisite: ENGL 1301 Composition I or equivalent

Topical Outline:

Read and appreciate literature

Fiction

Poetry

Drama

Vocabulary of literature

Reader response to literature

Analytical approaches to literature

Critical Approaches to literature

Research instrument

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate knowledge of individual and collaborative research processes.	CT CM TW	While working with other students in a small group setting, the learner will (TWL) design an oral presentation with a written component that examines a piece of literature contained in our textbook. Students will be required to incorporate researched material into their presentation and justify by including citations and a Works Cited page.

2. Develop ideas and synthesize primary and secondary sources within focused academic arguments, including one or more research-based essays.	CT	Students will work in groups to prepare a written report analyzing the data given and answering questions given.
3. Analyze, interpret, and evaluate a variety of texts for the ethical and logical uses of evidence.	CT CM	Upon the completion of an assigned set of readings of short fiction, poetry, or drama, TLW critically analyze a piece based on a given element of fiction and support their assertion with evidence from the text in an oral or written format .
4. Write in a style that clearly communicates meaning, builds credibility, and inspires belief or action.	CM	Papers will be graded for mechanics, structure, content, logic and accuracy.
5. Apply the conventions of style manuals for specific academic disciplines. (e.g., APA, CMS, MLA, etc.)	CT	Students will work in groups to prepare a written report analyzing the data given and answering questions given.
6. Students will be able to read, write about, and respond to literature.	CM	Utilizing knowledge gained from reading assigned literature, TLW will effectively summarize, draw comparisons/contrasts and exhibit comprehension by producing a written literary response journal on a weekly basis.
7. Students will be able to think critically about, interpret, and analyze text.	CT	Students will work in groups to prepare a written report analyzing the data given and answering questions given.
8. Students will be able to complete a researched instrument which will be documented in accordance to MLA guidelines.	CM PR	After completing a unit on plagiarism and MLA formatting, TLW utilize MLA guidelines and formatting in order to develop a written research- based project that is free of plagiarism.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: Students will write a minimum of **four** essays including a researched essay responding to some aspect of literature and exams according to the policy of the individual instructor. A departmental rubric will stand as a basis for scoring.

Other grades will be assigned through the use of exams/quizzes.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Amy Rogers	Signature Amy Rogers	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Technical & Business Writing

Prefix and Number: ENGL 2311

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Intensive study of and practice in professional settings. Focus on the types of documents necessary to make decisions and take action on the job, such as proposals, reports, instructions, policies and procedures, e-mail messages, letters, and descriptions of products and services. Practice individual and collaborative processes involved in the creation of ethical and efficient documents.

Prerequisites/Co-requisites:

Prerequisite: ENGL 1301 Composition I

Topical Outline:

This course will cover the following topics:

- preparation for writing in business situations
- preparation of business related documents (cover letters, resumes, etc.)
- preparing a business proposal
- preparing a presentation

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Recognize, analyze, and accommodate diverse audiences.	CM TW	As a class, have the class discuss the possible audiences they may encounter in their chosen field. Have students analyze the needs of each audience and the importance in cultivating sensitivity to various audiences and create a document reporting their findings. To accompany this, have students examine documents on the same topic that are written for different audiences and have them write a document in which they analyze the differences between the documents and how those differences reflect the different audiences.

2. Produce documents appropriate to audience, purpose, and genre.	CT CM	Identify a school or community issue that currently needs to be addressed. Have students analyze the source of the problem and point out the citizens affected. Then, have the students write a memo to school or community leaders sharing their findings. Rewrite this memo for community members. Rewrite a third time for someone from another community who faces a similar problem. In small groups, read and evaluate the unique needs of each audience.
3. Analyze the ethical responsibilities involved in technical communication.	PR	<p>1. Locate articles reporting unethical behavior in the business world and the consequences of each. In small groups find possible solutions by asking these questions: How can I know the “right action” in this situation? What values do I want to represent in this situation. Write a summary and submit to their instructor.</p> <p>2. Go to www.gervaseprograms.georgetown.edu/plagiarism.html or any other website that discusses plagiarism in schools or the workplace. Write a working definition of plagiarism and a list of strategies for avoiding it. Have each student bring his findings to class for discussion. Create a master list of strategies decided on by the class to give to their instructor.</p>
4. Locate, evaluate, and incorporate pertinent information.	CT	As a class, discuss academic honesty. Answer these questions: What leads to academic dishonesty? How can students be held accountable for academic honesty? List examples of academic dishonesty in a school setting. As an individual, research the academic honesty code published online by two reputable universities. Write a paper enumerating actions that are considered academic

		dishonesty in these schools. Each student should report his/her findings to the class.
5. Develop verbal, visual, and multimedia materials as necessary, in individual and/or collaborative projects, as appropriate.	CM TW	<p>1. Have a group of students work together to generate a presentation for their peers that includes verbal, visual, and multimedia components. Have each student in the group be responsible for a certain aspect of the project and upon completion, have them fill out an evaluation in which they evaluate both their other team members and themselves. Finally, have the class as a whole evaluate each presentation they've seen, focusing primarily on whether or not the material covered was communicated efficiently and effectively to them.</p> <p>2. As a team, locate leaders that will take part in a filmed interview about ethics in the business world. Create a list of pertinent questions to be asked. Assign individuals on the team a part of the interview to summarize for the class. Create a chart that reflects what they learn. Present the film, an oral summary, and the chart to the class.</p>
6. Edit for appropriate style, including attention to word choice, sentence structure, punctuation, and spelling.	CM PR	<p>1. Conduct a lesson in which the teacher emphasizes to students that editing and revising are a personal responsibility. Focus specifically on the idea that the student's writing reflects either positively or negatively on them and can have a significant impact on the way people perceive them. To illustrate, have students look at pairs of documents in which one has been edited for punctuation, sentence structure, and spelling and the other has not. Have them evaluate and analyze the two documents in order to decide if one is more effective and professional than the other. Require the students</p>

		<p>to write a short essay in which they justify their decision and explain why they feel that editing is either important or not.</p> <p>2. Go to owl.com to locate a rubric that covers standards for a college composition. Using this as a guide, create their own rubric that establishes the standards that their instructor expects they to meet. Using the rubric and working with a partner, edit a paper they must submit to their instructor, correcting sentence structure, word choice, punctuation and spelling.</p>
7. Design and test documents for easy reading and navigation.	CM CT	<p>Locate a professional website. Using a rubric, evaluate the quality of its navigation based on ease of use. Give an oral presentation showing the class the website and discussing its strengths and weaknesses.</p>
8. To adapt the particular rhetorical demands of the audience to appropriate style, purpose, and structure.	CM	<p>Students will write a justification for budget items to administration.</p>
9. To apply the appropriate modes of expression, including informative, persuasive, descriptive, narrative, and scientific.	CM	<p>The students will submit a technical paper, introducing a new product developed for the company.</p>
10. To understand professional writing as a recursive, connected, and interactive process which includes prewriting, drafting, revising, editing, and proofreading.	CM	<p>The students will submit a draft for peer review.</p>

11. To read, analyze, and synthesize various professional materials.	CT	Have each student choose a unique professional document to read and analyze, focusing on how clearly and effectively does it communicate its point to the reader. Upon finishing this analysis, the student should then prepare a revised version of the document that they believe to better communicate the material. Finally, have the other students in the class evaluate the original and the revised versions and offer feedback on which they think is more effective.
12. To construct and integrate graphic/visual aids coherently into professional documents.	CM	<p>1. Have students compile a document in which they have incorporated graphical/visual aids and then have them conduct a presentation to the class in which they explain why they included the aid (what information does it add that couldn't be gotten from the document itself) and why they included how and where they did in the document. The need to explain how and why they incorporated the visual/graphical aid should compel the student to spend more time evaluating the proper use and integration of it.</p> <p>2. In a group, list processes faced by a technical writer in the business world. An example of this is the process an employee be aware of when reporting unethical abuses. Individually, write an analytic report explaining their findings. Integrate into their report a visual relevant to the topic. Submit to their instructor.</p>
13. To understand the importance of cooperative and collaborative discussion leading to a group-generated document.	TW	Interview a member of their team before beginning a group project. Prepare questions and write down their classmate's answers without commenting on their own. Report their team member's ideas to the group.

Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Required reading of assigned chapters with exercises and quiz reviews; case study reviews of legal, ethical, time and social constraints; working with teams; analyzing sample documents and abstracts; editing for readable styles; designing visuals; and reviewing of memo reports and electronic correspondence.

METHODS OF EVALUATION:

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Dosha King	Signature <i>Dosha King</i>	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: British Literature I

Prefix and Number: ENGL 2322

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of the development of British literature from the Anglo-Saxon period to the Eighteenth Century. Students will study works of prose, poetry, drama, and fiction in relation to their historical, linguistic, and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

Prerequisites/Co-requisites:

Prerequisite: ENGL 1301 Composition I

Topical Outline:

This course covers the following literary periods:

1. The beginnings of English and the medieval period
2. The Renaissance
3. The Reformation

Individual instructors should choose authors and works from each of these periods to reflect what they intend to focus on in their course.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Identify key ideas, representative authors and works, significant historical or cultural events, and characteristic perspectives or attitudes expressed in the literature of different periods or regions.	CT SR	Students may synthesize ideas from a variety of different texts through reflective writings and/or essay exams.
2. Analyze literary works as expressions of individual or communal values within the social, political, cultural, or religious contexts of different literary periods.	CT SR	In class discussions and short answer questions, students will contribute their opinions and/or observations about how the issues presented in the literature studied compare/contrast with modern community/state/national issues and needs and about how the different eras and cultures

		presented compare/contrast with each other.
3. Demonstrate knowledge of the development of characteristic forms or styles of expression during different historical periods or in different regions.	CM	Students will be asked to provide interpretations of the literature studied in class discussions or short written responses in which they present an interpretation and provide justification for their argument.
4. Articulate the aesthetic principles that guide the scope and variety of works in the arts and humanities.	CT CM	Journal responses and/or study questions will be assigned that allow students to make connections between the literature that they read and the aesthetic principles taught in the lectures.
5. Write research-based critical papers about the assigned readings in clear and grammatically correct prose, using various critical approaches to literature.	CT CM	Write a research paper comparing the differing time periods, cultures, and/or literary elements found in which the student will present an argument and provide justification for their observations and where the grading of the essay will be based, at least in part, on the student's accuracy and/or depth of presentation.
6. Students will become familiar with selected pieces of English from its beginnings through the Renaissance and with various literary, historical, sociological, and philosophical aspects of them.	CT CM	Class discussions, lectures, journals, and short written assignments will be used to allow students to make connections between seemingly unrelated ideas and to make personal connections with the literature.
7. Students will analyze emotional, psychological, moral, and political issues which appear in English literature.	PR SR	In discussions and journal entries, students will evaluate themselves as learners/readers and identify how their own life experiences and personal issues compare with those presented to them in the literature and what lessons the literature may teach them about their own lives and world.
8. Students will learn to ask and respond to questions about the texts which they are asked to read.	CM	Weekly in-class writings and/or reading quizzes will be administered to insure the students' connection of content with the material being studied in readings and lectures.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:**METHODS OF INSTRUCTION:**

METHODS OF EVALUATION: Ideally, there should be an assessment for each of the three units offered in this course, whether that assessment is a traditional test or an essay is up to the instructor.

Instructors should also implement some method of assuring that students are doing the basic reading and this should also be a part of the course grade. This method may be a daily quiz or study questions or other similar device.

Additionally, there is a researched instrument due by the end of the course. This researched instrument may be on a topic of the instructor's choice (or approval).

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brandon Barnes	Signature Brandon Barnes	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: British Literature II

Prefix and Number: ENGL 2323

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of the development of British literature from the Romantic period to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

Prerequisites/Co-requisites:

Prerequisite: ENGL 1301 Composition I

Topical Outline:

This course covers the following literary periods:

1. Romantic/ 18th century
2. Victorian/19th century
3. Modern/20th century

Individual instructors should choose authors and works from each of these periods to reflect what they intend to focus on in their course.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Identify key ideas, representative authors and works, significant historical and cultural events, and characteristic perspectives or attitudes expressed in the literature of different periods or regions.	CT SR	Students may synthesize ideas from a variety of different texts through reflective writings and/or essay exams.
2. Analyze literary works as expressions of individual or communal values within the social, political, cultural, or religious contexts of different literary periods.	CT SR	In class discussions and short answer questions, students will contribute their opinions and/or observations about how the issues presented in the literature studied compare/contrast with modern community/state/national issues and needs and about how the different eras and cultures presented compare/contrast with each other.

3. Demonstrate knowledge of the development of characteristic forms or styles of expression during different historical periods or in different regions.	CM	Students will be asked to provide interpretations of the literature studied in class discussions or short written responses in which they present an interpretation and provide justification for their argument.
4. Articulate the aesthetic principles that guide the scope and variety of works in the arts and humanities.	CT CM	Journal responses and/or study questions will be assigned that allow students to make connections between the literature that they read and the aesthetic principles taught in the lectures.
5. Write research-based critical papers about the assigned readings in clear and grammatically correct prose, using various critical approaches to literature.	CT CM	Write a research paper comparing the differing time periods, cultures, and/or literary elements found in which the student will present an argument and provide justification for their observations and where the grading of the essay will be based, at least in part, on the student's accuracy and/or depth of presentation.
6. Students will become familiar with selected pieces of English from the end of the Renaissance through the contemporary period and with various literary, historical, sociological, and philosophical aspects of them.	CT CM	Class discussions, lectures, journals, and short written assignments will be used to allow students to make connections between seemingly unrelated ideas and to make personal connections with the literature.
7. Students will analyze emotional, psychological, moral, and political issues which appear in English literature .	PR SR	In discussions and journal entries, students will evaluate themselves as learners/readers and identify how their own life experiences and personal issues compare with those presented to them in the literature and what lessons the literature may teach them about their own lives and world.
8. Students will learn to ask and respond to questions about the texts which they are asked to read.	CM	Weekly in-class writings and/or reading quizzes will be administered to insure the students' connection of content with the material being studied in readings and lectures.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:**METHODS OF INSTRUCTION:**

METHODS OF EVALUATION: Instructors should also implement some method of assuring that students are doing the basic reading and this should also be a part of the course grade. This method may be a daily quiz or study questions or other similar device. Additionally, the student is given the option of writing a research paper or a critical analysis due by the end of the course. The researched essay may be on a topic of the instructor's choice (or approval) but this project is expected to be mostly formal/academic in nature. The critical analysis, while less researched than a traditional research paper, is still mostly formal or academic in nature.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brandon Barnes	Signature Brandon Barnes	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: American Literature I

Prefix and Number: ENGL 2327

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of American literature from the period of exploration and settlement through the Civil War. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.

Prerequisites/Co-requisites:

Prerequisite: ENGL 1301 Composition I

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Identify key ideas, representative authors and works, significant historical or cultural events, and characteristic perspectives or attitudes expressed in the literature of different periods or regions.	CT CM TW PR	Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.
2. Analyze literary works as expressions of individual or communal values within the social, political, cultural or religious contexts of different literary periods.	SR	Utilizing knowledge gained from reading assigned early American literature, TLW critically analyze the political/economic/social issues found in the readings. 70% of the TLW score a 3 or higher on the social responsibility rubric.
3. Demonstrate knowledge of the development of characteristic forms or styles of expression during different historical periods or in different regions.	PR	Upon completing an assigned set of readings and a review on plagiarism and MLA formatting, TLW use MLA guidelines to develop a researched project that is free of plagiarism. 70% of TLW score a 3 or above on the MLA project rubric.

<p>4. Articulate the aesthetic principles that guide the scope and variety of works in the arts and humanities.</p>	<p>CT CM TW PR</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.</p>
<p>5. Write research-based critical papers about the assigned readings in clear and grammatically correct prose, using various critical approaches to literature.</p>	<p>CT</p>	<p>After completing the assigned reading of early American fiction, poetry, or drama, TLW write a research-based critical paper over the assigned readings in clear and grammatically correct prose, using various approaches to literature. 70% of TLW score a 3 or higher on the critical thinking rubric.</p>
<p>6. At the conclusion of the course, the student will exhibit in a final exam his or her ability to: compare themes in American literature, research and discuss historical and authorial perspective in American literature, discuss character motive in American literature, describe selected scenes from a variety of American literature, define selected terms important in considering American literature, identify characters in selected works of American literature, recognize quotes from selected works in American literature, respond to readings from American literature, recognize significant American writers, formulate an American philosophy, discuss diversity issues in American literature, and</p>	<p>CT CM TW PR</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.</p>

assess the value of the study of American literature.		
7. In a variety of assigned activities, the student will: read and analyze texts, participate in discussions, share research, and cooperate in group work to address literary questions relating to various texts.	CM	TLW exhibit their knowledge and comprehension of the weekly assigned readings by writing a literary response journal and participating in the classroom discussion on a weekly basis. 70% of TLW score a 3 or higher on the weekly journal rubric.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brandon Barnes	Signature Brandon Barnes	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: American Literature II

Prefix and Number: ENGL 2328

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of American literature from the Civil War to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from among a diverse group of authors for what they reflect and reveal about the evolving American experience and character.

Prerequisites/Co-requisites:

Prerequisite: ENGL 1301 Composition I

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Identify key ideas, representative authors and works, significant historical or cultural events, and characteristic perspectives or attitudes expressed in the literature of different periods or regions.	CT CM TW PR	Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.
2. Analyze literary works as expressions of individual or communal values within the social, political, cultural or religious contexts of different literary periods.	SR	Utilizing knowledge gained from reading assigned early American literature, TLW critically analyze the political/economic/social issues found in the readings. 70% of the TLW score a 3 or higher on the social responsibility rubric.
3. Demonstrate knowledge of the development of characteristic forms or styles of expression during different historical periods or in different regions.	PR	Upon completing an assigned set of readings and a review on plagiarism and MLA formatting, TLW use MLA guidelines to develop a researched project that is free of plagiarism. 70% of TLW score a 3 or above on the MLA project rubric.

<p>4. Articulate the aesthetic principles that guide the scope and variety of works in the arts and humanities.</p>	<p>CT CM TW PR</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.</p>
<p>5. Write research-based critical papers about the assigned readings in clear and grammatically correct prose, using various critical approaches to literature.</p>	<p>CT</p>	<p>After completing the assigned reading of early American fiction, poetry, or drama, TLW write a research-based critical paper over the assigned readings in clear and grammatically correct prose, using various approaches to literature. 70% of TLW score a 3 or higher on the critical thinking rubric.</p>
<p>6. At the conclusion of the course, the student will exhibit in a final exam his or her ability to: compare themes in American literature, research and discuss historical and authorial perspective in American literature, discuss character motive in American literature, describe selected scenes from a variety of American literature, define selected terms important in considering American literature, identify characters in selected works of American literature, recognize quotes from selected works in American literature, respond to readings from American literature, recognize significant American writers, formulate an American philosophy, discuss diversity issues in American literature, and</p>	<p>CT CM TW PR</p>	<p>Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.</p>

assess the value of the study of American literature.		
7. In a variety of assigned activities, the student will: read and analyze texts, participate in discussions, share research, and cooperate in group work to address literary questions relating to various texts.	CM	TLW exhibit their knowledge and comprehension of the weekly assigned readings by writing a literary response journal and participating in the classroom discussion on a weekly basis. 70% of TLW score a 3 or higher on the weekly journal rubric.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brandon Barnes	Signature Brandon Barnes	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: World Literature I

Prefix and Number: ENGL 2332

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of world literature from the ancient world through the sixteenth century. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

Prerequisites/Co-requisites:

Prerequisite: ENGL 1301 Composition I

Topical Outline:

This course covers the following literary periods:

1. Ancient
2. Medieval
3. Renaissance

Individual instructors should choose authors and works from each of these periods to reflect what they intend to focus on in their course.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Identify key ideas, representative authors and works, significant historical or cultural events, and characteristic perspectives or attitudes expressed in the literature of different periods or regions.	SR	Class discussions and lectures over the differing pieces of literature.
2. Analyze literary works as expressions of individual or communal values within the social, political, cultural, or religious contexts of different literary periods.	SR CT	In class discussions and short answer questions, students will contribute their opinions and/or observations about how the issues presented in the literature studied compare/contrast with modern community/state/national issues and needs and about how the different eras and cultures

		presented compare/contrast with each other.
3. Demonstrate knowledge of the development of characteristic forms or styles of expression during different historical periods or in different regions.	CT	Students will be asked to provide interpretations of the literature studied in class discussions or short written responses in which they present an interpretation and provide justification for their argument.
4. Articulate the aesthetic principles that guide the scope and variety of works in the arts and humanities.	CT CM	Journal responses and/or study questions will be assigned that allow students to make connections between the literature that they read and the aesthetic principles taught in the lectures.
5. Write research-based critical papers about the assigned readings in clear and grammatically correct prose, using various critical approaches to literature.	CT CM	Write a research paper comparing the differing time periods, cultures, and/or literary elements found in which the student will present an argument and provide justification for their observations and where the grading of the essay will be based, at least in part, on the student's accuracy and/or depth of presentation.
6. Students will become familiar with selected pieces of literature through centuries and from around the globe and with various literary, historical, sociological, and philosophical aspects of them.	CT CM	Class discussions, lectures, journals, and short written assignments will be used to allow students to make connections between seemingly unrelated ideas and to make personal connections with the literature.
7. Students will analyze emotional, psychological, moral, and political issues which appear in literature from around the world.	PR SR	In discussions and journal entries, students will evaluate themselves as learners/readers and identify how their own life experiences and personal issues compare with those presented to them in the literature and what lessons the literature may teach them about their own lives and world.
8. Students will learn to ask and respond to questions about the texts which they are asked to read.	CM	Weekly in-class writings and/or reading quizzes will be administered to insure the students' connection of content with the material being studied in readings and lectures.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: Ideally, there should be an assessment for each of the three units offered in this course, whether that assessment is a traditional test or an essay is up to the instructor.

Instructors should also implement some method of assuring that students are doing the basic reading and this should also be a part of the course grade. This method may be a daily quiz or study questions or other similar device.

Additionally, there is a research instrument due by the end of the course. This instrument may be on a topic of the instructor's choice (or approval).

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brandon Barnes	Signature Brandon Barnes	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: World Literature II

Prefix and Number: ENGL 2333

Division – Department: Language Arts - English

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of world literature from the seventeenth century to the present. Students will study works of prose, poetry, drama, and fiction in relation to their historical and cultural contexts. Texts will be selected from a diverse group of authors and traditions.

Prerequisites/Co-requisites:

Prerequisite: ENGL 1301 Composition I

Topical Outline:

This course covers the following literary periods:

1. Enlightenment
2. Romantic
3. Realism
4. Modernism
5. Contemporary

Individual instructors should choose authors and works from each of these periods to reflect what they intend to focus on in their course.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Identify key ideas, representative authors and works, significant historical or cultural events, and characteristic perspectives or attitudes expressed in the literature of different periods or regions.	CM SR	Quizzes and in-class writings will be administered over the discussions and lectures concerning the materials in class.

2. Analyze literary works as expressions of individual or communal values within the social, political, cultural, or religious contexts of different literary periods.	SR	In class discussions and short answer questions, students will contribute their opinions and/or observations about how the issues presented in the literature studied compare/contrast with modern community/state/national issues and needs and about how the different eras and cultures presented compare/contrast with each other.
3. Demonstrate knowledge of the development of characteristic forms or styles of expression during different historical periods or in different regions.	CT	Students will be asked to provide interpretations of the literature studied in class discussions or short written responses in which they present an interpretation and provide justification for their argument.
4. Articulate the aesthetic principles that guide the scope and variety of works in the arts and humanities.	CT CM	Journal responses and/or study questions will be assigned that allow students to make connections between the literature that they read and the aesthetic principles taught in the lectures.
5. Write research-based critical papers about the assigned readings in clear and grammatically correct prose, using various critical approaches to literature.	CT CM	Write a research paper comparing the differing time periods, cultures, and/or literary elements found in which the student will present an argument and provide justification for their observations and where the grading of the essay will be based, at least in part, on the student's accuracy and/or depth of presentation.
6. Students will become familiar with selected pieces of literature through centuries and from around the globe and with various literary, historical, sociological, and philosophical aspects of them.	CT CM	Class discussions, lectures, journals, and short written assignments will be used to allow students to make connections between seemingly unrelated ideas and to make personal connections with the literature.
7. Students will analyze emotional, psychological, moral, and political issues which appear in literature from around the world.	PR SR	They will be responsible for weekly quizzes and in-class writings over the terms and major periods discussed in class.

8. Students will learn to ask and respond to questions about the texts which they are asked to read.	CM	Weekly in-class writings and/or reading quizzes will be administered to insure the students' connection of content with the material being studied in readings and lectures.
Before the semester begins, contact your division chair for specific details concerning the assignment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: Ideally, there should be an assessment for each of the units offered in this course. Whether that assessment is a traditional test or an essay is up to the instructor, but a minimum of two exams should be administered during the semester.

Instructors should also implement some method of assuring that students are doing the basic reading and this should also be a part of the course grade. This method may be a daily quiz or study questions or other similar device.

Additionally, the student is given the option of writing a researched instrument or a critical analysis due by the end of the course. The researched instrument may be on a topic of the instructor's choice (or approval) but this project is expected to be mostly formal/academic in nature. The critical analysis, while less researched than a traditional research paper, is still mostly formal or academic in nature.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brandon Barnes	Signature Brandon Barnes	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Federal Government

Prefix and Number: GOVT 2305

Division – Department: Social Sciences - Government

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Origin and development of the U.S. Constitution, structure and powers of the national government including the legislative, executive, and judicial branches, federalism, political participation, the national election process, public policy, civil liberties and civil rights.

Prerequisites/Co-requisites:

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Explain the origin and development of constitutional democracy in the United States.	CT CM SR PR	Students will use new academic knowledge to apply fundamental principles of constitutional democracy in the U.S. to current real world settings. Students will contribute their opinions and concerns about community, state, or national issues and needs as they relate to U.S. Constitutional principles. They will compare and contrast the evolution and changes in constitutional interpretation. Students will accomplish this through political in class discussions, journals, discussion questions, essays, and / or presentations.
2. Demonstrate knowledge of the federal system.	CT CM SR PR	<ul style="list-style-type: none"> Political Analysis Assignments Exams In Class Political Issue Discussions Discussion Questions

3. Describe separation of powers and checks and balances in both theory and practice.	CT CM SR PR	<ul style="list-style-type: none"> • Political Analysis Assignments • Exams • In Class Political Issue Discussions • Discussion Questions
4. Demonstrate knowledge of the legislative, executive, and judicial branches of the federal government.	CT CM SR PR	Students will make connections between the actions of the three branches with regards to differences and similarities and identify problems in decision making as applied to real world events, circumstances, and / or crisis. They will justify their arguments by essay, presentation, or news reporting.
5. Evaluate the role of public opinion, interest groups, and political parties in the political system.	CT CM SR PR	<ul style="list-style-type: none"> • Political Analysis Assignments • Exams • In Class Political Issue Discussions • Discussion Questions
6. Analyze the election process.	CT CM SR <u>PR</u>	Students will follow a current election or research a previous election. Students will identify connections between life experiences and those within the academic course by explaining which elections issues are relevant to their life circumstances or important enough, according to their values, circumstances, and beliefs, to motivate them to participate in some way in the election process.
7. Describe the rights and responsibilities of citizens.	CT <u>CM</u> SR PR	Students will present an oral or written presentation and will be asked to support the reason and logic of their ideas and arguments as well as assess the mechanics, connection with main topic, structure, accuracy and / or depth of content. They will achieve this through: In class discussions / debate, essays, and / or discussion questions.
8. Analyze issues and policies in U.S. politics.	CT CM SR PR	<ul style="list-style-type: none"> • Political Analysis Assignments • Exams • Class Political Issue Discussions • Discussion Questions

Before the semester begins, contact your division chair for specific details

concerning the assessment plan created to measure the core objectives of this course.

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: Upon completion of each study unit, there will be a test to determine the mastery of the unit's material. Correctly answering 70 percent (70%) of the questions is considered passing. Some classes require papers, assignments or group assignments to complete the grade determination.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Donna Godwin	Signature Donna Godwin	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Texas Government

Prefix and Number: GOVT 2306

Division – Department: Social Sciences - Government

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Origin and development of the Texas Constitution, structure and powers of state and local government, federalism and inter-governmental relations, political participation, the election process, public policy, and the political culture of Texas.

Prerequisites/Co-requisites:

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Explain the origin and development of Texas Constitution.	CT CM SR PR	Students will use new academic knowledge to apply fundamental principles of constitutional democracy in the Texas to current real world settings. Students will contribute their opinions and concerns about community, state, or national issues and needs as they relate to Texas Constitutional principles. They will compare and contrast the evolution and changes in constitutional interpretation. Students will accomplish this through political in class discussions, journals, discussion questions, essays, and / or presentations.
2. Describe state and local	CT	Students will work in groups to

political systems and their relationship with the federal government.	CM SR PR	prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.
3. Demonstrate knowledge of the federal system.	CT CM SR PR	Political Analysis Assignments Exams In Class Political Issue Debates Discussion Questions
4. Describe separation of powers and checks and balances in both theory and practice in Texas.	CT CM SR PR	Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.
5. Demonstrate knowledge of the legislative, executive, and judicial branches of Texas (federal) government.	CT CM SR PR	Students will make connections between the actions of the three branches with regards to differences and similarities and identify problems in decision making as applied to real world events, circumstances, and / or crisis. They will justify their arguments by essay, presentation, or news reporting.
6. Evaluate the role of public opinion, interest groups, and political parties in the political system.	CT CM SR PR	Political Analysis Assignments Exams Class Political Discussion Discussion Questions
7. Analyze the state and local	CT	Students will follow a current

election process.	CM SR PR	election or research a previous election. Students will identify connections between life experiences and those within the academic course by explaining which elections issues are relevant to their life circumstances or important enough, according to their values, circumstances, and beliefs, to motivate them to participate in some way in the election process.
8. Identify the rights and responsibilities of citizens.	CT CM SR PR	Students will work in groups to prepare a written report analyzing the data given and answering questions given. Papers will be graded for mechanics, structure, content, logic and accuracy. The reflection portion will show community connection, needs, opinions, concerns, and involve applying skills in a real world setting. Students are to self-analyze, link the class to real life, pursue activities to expand their knowledge, a plan of improvement and a topic of interest related to the topic.
9. Analyze issues and policies in Texas (U.S.) politics.	CT CM SR PR	<ul style="list-style-type: none"> • Political Analysis Assignments • Exams • Class Political Issue Discussion • Discussion Questions
10. Describe the rights and responsibilities of citizens.	CT CM SR PR	Students will present an oral or written presentation and will be asked to support the reason and logic of their ideas and arguments as well as assess the mechanics, connection with main topic, structure, accuracy and / or depth of content. They will achieve this through: In class discussions / debate, essays, and / or discussion questions.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: Upon completion of each study unit, there will be a test to determine the mastery of the unit's material. Correctly answering 70 percent (70%) of the questions is considered passing. Some classes require papers, assignments or group assignments to complete the grade determination.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Donna Godwin	Signature Donna Godwin	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013

Course: HIST 1301



**TRINITY VALLEY COMMUNITY COLLEGE
ADMINISTRATIVE-MASTER SYLLABUS**

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: United States History I

Prefix and Number: HIST 1301

Division – Department: Social Sciences - History

Course Type: Select from one of the following categories.

- ☐ **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ **Academic TVCC Core Course**
- ☐ **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of the social, political, economic, cultural, and intellectual history of the United States from the pre-Columbian era to the Civil War/Reconstruction period. United States History I includes the study of pre-Columbian, colonial, revolutionary, early national, slavery and sectionalism, and the Civil War/Reconstruction eras. Themes that may be addressed in United States History I include: American settlement and diversity, American culture, religion, civil and human rights, technological change, economic change, immigration and migration, and creation of the federal government.

Prerequisites/Co-requisites:

Pre-requisite: TSI complete in Reading

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Create an argument through the use of historical evidence.	CT	Students will be required to use factual information to answer two questions: Was the Civil War preventable or not and Why; Second students will use factual information to determine whether military reconstruction in the South advanced civil rights for former slaves or made race relations worse in the 20 th century.
2. Analyze and interpret primary and secondary sources.	CT	Students will demonstrate the understanding of primary source material and their relationship to secondary works by examination, writing and article or book review in which they will be required to identify the use of primary sources in the work.
3. Analyze the effects of historical, social, political, economic, cultural, and global forces of this period of US history.	CT	In each of the fifteen topics studied, the student will be taught life lessons that the historical period provides for US citizens at the time and at the present: for example: The struggle for religious freedom is an example of how religious conflict can be avoided in the modern world. Secondly, for example, the

		<p>provisions of the United States Constitution reflected a fear of tyranny from government and serves today as continued protection against government violations of individual rights and freedoms</p> <p>Third, the coming of the Civil War demonstrates what can happen to any nations when large blocks or regions of people fail to agree on the rule of law and the proper interpretation of the basic law</p> <p>Accomplishment of these activities will be evaluated by discussion exams.</p>
4. Students will demonstrate effective written communication skills.	CT CM SR	<p>Each student will write either a book or an article review that will be graded not only on content but also on proper grammar usage.</p> <p>Each written critique will reflect the ability to analyze the author's purpose in writing, fulfillment of that purpose. Students will be required to indicate the ideological bias of the author of the secondary work in his or her conclusions.</p>
5. Students will learn the key elements in taking responsibility for the success in this course.	PR	Students will be required to meet each deadline in submitting work and in taking exams at the appointed time.
6. Students will take responsibility for completing the outside writing project and exams with ethical standards that exclude cheating and plagiarism.	PR	Students will be assessed penalties for failure to comply with deadlines and work will be rejected that violates syllabus standards for ethical behavior
7. Students will connect lessons in US history with problem solving in American and world societies.	CT SR PR	As stated under critical thinking above, each history topic will emphasize the relevance of American accomplishments in improving society as well as acknowledging failures, so that students can solve current life problems.

8. Students will discover how they can impact current US society.	CM SR PR	The required book or article review should have a lesson that aids the student in serving the community.
9. Learning to write an article or book review.	CT CM SR	By writing a book or article review the student will learn a new academic skill that will be used in other social science classes.
10. Students will learn the importance of class attendance in college coursework.	PR	An attendance grade will be issued for each student with penalties for absences and late arrival to class. The grade will count as same as an exam grade.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: This course shall be structured into units. Upon completion of essential competencies, students shall be tested on the material. Hour exams may contain subjective questions such as essay or objective questions such as matching and multiple choice. Other points may be factored into test scores which pay a premium to those students who attend class regularly, who complete class assignments, and who complete assigned semester projects. The final exam will be comprehensive and will cover all the material for the semester. Any work missed during the course shall be made up at the discretion of the instructor.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Rob Risko	Signature Rob Risko	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: United States History II

Prefix and Number: HIST 1302

Division – Department: Social Sciences - History

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of the social, political, economic, cultural, and intellectual history of the United States from the Civil War/Reconstruction era to the present. United States History II examines industrialization, immigration, world wars, the Great Depression, Cold War and post-Cold War eras. Themes that may be addressed in United States History II include: American culture, religion, civil and human rights, technological change, economic change, immigration and migration, urbanization and suburbanization, the expansion of the federal government, and the study of U.S. foreign policy.

Prerequisites/Co-requisites:

Pre-requisite: TSI complete in Reading

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Create an argument through the use of historical evidence	CT	Students will be required to use factual information to answer two questions: Was the Civil War preventable or not and Why; Second students will use factual information to determine whether military reconstruction in the South advanced civil rights for former slaves or made race relations worse in the 20 th century.
2. Analyze and interpret primary and secondary sources	CT	Students will demonstrate the understanding of primary source material and their relationship to secondary works by examination, writing and article or book review in which they will be required to identify the use of primary sources in the work.
3. Analyze the effects of historical, social, political, economic, cultural, and global forces of this period of US history	CT	In each of the fifteen topics studied, the student will be taught life lessons that the historical period provides for US citizens at the time and at the present: for example: The struggle for religious freedom is an example of how religious conflict can be avoided in the modern world. Secondly, for example, the

		<p>provisions of the United States Constitution reflected a fear of tyranny from government and serves today as continued protection against government violations of individual rights and freedoms</p> <p>Third, the coming of the Civil War demonstrates what can happen to any nations when large blocks or regions of people fail to agree on the rule of law and the proper interpretation of the basic law</p> <p>Accomplishment of these activities will be evaluated by discussion exams.</p>
4. Students will demonstrate effective written communication skills	CT CM SR	<p>Each student will write either a book or an article review that will be graded not only on content but also on proper grammar usage. Each written critique will reflect the ability to analyze the author's purpose in writing, fulfillment of that purpose. Students will be required to indicate the ideological bias of the author of the secondary work in his or her conclusions.</p>
5. Students will learn the key elements in taking responsibility for the success in this course	PR	Students will be required to meet each deadline in submitting work and in taking exams at the appointed time.
6. Students will take responsibility for completing the outside writing project and exams with ethical standards that exclude cheating and plagiarism	PR	Students will be assessed penalties for failure to comply with deadlines and work will be rejected that violates syllabus standards for ethical behavior
7. Students will connect lessons in US history with problem solving in American and world societies	CT SR PR	As stated under critical thinking above, each history topic will emphasize the relevance of American accomplishments in improving society as well as acknowledging failures, so that students can solve current life problems.
8. Students will discover how they can impact current US society	CM SR PR	The required book or article review should have a lesson that aids the student in serving the community.

9. Learning to write an article or book review	CT CM SR	By writing a book or article review the student will learn a new academic skill that will be used in other social science classes.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: This course shall be structured into units. Upon completion of essential competencies, students shall be tested on the material. Hour exams may contain subjective questions such as essay or objective questions such as matching and multiple choice. Other points may be factored into test scores which pay a premium to those students who attend class regularly, who complete class assignments, and who complete assigned semester projects. The final exam will be comprehensive and will cover all the material for the semester. Any work missed during the course shall be made up at the discretion of the instructor.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Rob Risko	Signature Rob Risko	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Texas History

Prefix and Number: HIST 2301

Division – Department: Social Sciences - History

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A survey of the political, social, economic, cultural, and intellectual history of Texas from the pre-Columbian era to the present. Themes that may be addressed in Texas History include: Spanish colonization and Spanish Texas; Mexican Texas; the Republic of Texas; statehood and secession; oil, industrialization, and urbanization; civil rights; and modern Texas.

Prerequisites/Co-requisites:

Pre-requisite: TSI complete in Reading

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Create an argument through the use of historical evidence	CT	Students will be required to use factual information to answer two questions: Could the Battle for Texas Independence been avoided had Santa Anna made concessions or not and Why; Second students will use factual information to determine whether applying for statehood in the best interest of an independent Texas Republic or not and Why.
2. Analyze and interpret primary and secondary sources	CT	Students will demonstrate the understanding of primary source material and their relationship to secondary works by examination, writing and article or book review in which they will be required to identify the use of primary sources in the work.
3. Analyze the effects of historical, social, political, economic, cultural, and global forces of this period of Texas history	CT	In each of the topics studied, the student will be taught life lessons that the historical period provides for Texas citizens at the time and at the present: for example: The struggle for racial equality is an example of how a racial conflict can be avoided in the modern world.

		<p>Secondly, for example, the provisions of the Texas Constitution reflected a fear of tyranny from government and serves today as continued protection against state violations of individual rights and freedoms</p> <p>Third, the coming of the War for Texas Independence demonstrates what can happen to any state or country when large blocks or regions of people fail to agree on the rule of law and the proper interpretation of the basic law</p> <p>Accomplishment of these activities will be evaluated by discussion exams.</p>
4. Students will demonstrate effective written communication skills	CT CM SR	<p>Each student will write either a book or an article review that will be graded not only on content but also on proper grammar usage. Each written critique will reflect the ability to analyze the author's purpose in writing, fulfillment of that purpose. Students will be required to indicate the ideological bias of the author of the secondary work in his or her conclusions.</p>
5. Students will learn the key elements in taking responsibility for the success in this course	PR	Students will be required to meet each deadline in submitting work and in taking exams at the appointed time.
6. Students will take responsibility for completing the outside writing project and exams with ethical standards that exclude cheating and plagiarism	PR	Students will be assessed penalties for failure to comply with deadlines and work will be rejected that violates syllabus standards for ethical behavior
7. Students will connect lessons in Texas history with problem solving in American and world societies	CT SR PR	As stated under critical thinking above, each history topic will emphasize the relevance of Texan accomplishments in improving society as well acknowledging failures, so that students can solve current life problems.
8. Students will discover how they can impact current Texas society	CM SR PR	The required book or article review should have a lesson that aids the student in serving the community.

9. Learning to write an article or book review	CT CM SR	By writing a book or article review the student will learn a new academic skill that will be used in other social science classes.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: This course shall be structured into units. Upon completion of essential competencies, students shall be tested on the material. Hour exams may contain subjective questions such as essay or objective questions such as matching and multiple choice. Other points may be factored into test scores which pay a premium to those students who attend class regularly, who complete class assignments, and who complete assigned semester projects. The final exam will be comprehensive and will cover all the material for the semester. Any work missed during the course shall be made up at the discretion of the instructor.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Rob Risko	Signature Rob Risko	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Introduction to Humanities

Prefix and Number: HUMA 1301

Division – Department: Language Arts - Humanities

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This course is an interdisciplinary survey of cultures focusing on the philosophical and aesthetic factors in human values with an emphasis on the historical development of the individual and society and the need to create.

Prerequisites/Co-requisites:

None

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate awareness of the scope and variety of works in the arts and humanities.	CT CM	In class discussions, small group discussions, and short written responses, students will present interpretations and justification of their depth of understanding of key concepts.
2. Articulate how these works express the values of the individual and society within an historical and social context.	PR SR	In conjunction with course curriculum that addresses United States history, including the U.S. Constitution and the U.S. Declaration of Independence, and lectures and discussions on the individual rights and privileges of citizenship, students (legally illegible) will be encouraged to register to vote in political elections.
3. Articulate an informed personal reaction and respond critically to works in the arts and humanities.	CT CM PR	Students will complete a Self-Reflection Exercise after the first major exam in the course in which they will self-assess their personal expectations and preparation for that completed exam and define their strategy to prepare for future exams in the course.

4. Demonstrate knowledge and understanding of the influence of literature, philosophy, and the arts on cultural experiences.	CT CM	Lectures, videos, class discussions, and outside readings will be used to expose students to landmarks of the arts and humanities that exemplify 'dark' and 'light' eras in the human experience. Each student will communicate, in essay format, their understanding of 'dark' and 'light' in relation to learning and the arts. Essay responses will include concrete historical examples of 'dark' and 'light' periods.
5. Demonstrate an awareness of the creative process and why humans create.	CT CM	In class discussions, small group discussions, and short written responses, students will present interpretations and justification of their depth of understanding of key concepts.
6. Communicate understanding of the major concept of 'dark' and 'light' in relation to learning and the arts.	CT CM	Lectures, videos, class discussions, and outside readings will be used to expose students to landmarks of the arts and humanities that exemplify 'dark' and 'light' eras in the human experience. Each student will communicate, in essay format, their understanding of 'dark' and 'light' in relation to learning and the arts. Essay responses will include concrete historical examples of 'dark' and 'light' periods.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Read all assigned textbook material. Bring your textbook to class. Expect frequent reading quizzes.

Students may not share textbooks or notes during open- book quizzes.

Complete two (2) Critical Reviews of outside cultural events. Students will attend and review two cultural events **during** the semester. Events can be campus or community events such as concerts, recitals, art exhibits, plays, creative arts workshops, and lectures. Seek approval from the instructor for events or activities not included on this list. Critical Reviews must be submitted on or before the dates designated on the class schedule. Late submittals will be penalized 5 points per class day.

Complete four (4) major exams covering lectures, class discussions, and reading assignments. Exam question may be in the form of short answer, multiple choice, true-false, fill-in-the-blank, matching, or short (one paragraph) to medium (one page) written responses.

Maintain an orderly notebook of all class notes, assignments, and handouts.

Contribute to class discussions.

METHODS OF EVALUATION:

Four exams, 100 points apiece

Two Critical Reviews, 50 points apiece

Undetermined number of reading quizzes worth 1-10 points each for a max of 100 points.

Course Grades: 540 - 600 points = A
 480 - 539 points = B
 420 - 479 points = C
 360 - 419 points = D
 Less than 360 points = F

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Diane David	Signature Diane David	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: College Algebra

Prefix and Number: MATH 1314

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

In-depth study and applications of polynomial, rational, radical, exponential and logarithmic functions, and systems of equations using matrices. Additional topics such as sequences, series, probability, and conics may be included.

Prerequisites/Co-requisites:

Prerequisite: TSI Algebra complete or successful completion of Intermediate Algebra (DEVL 0310).

Topical Outline:

- I. Review (at instructor's discretion)
 - A. Rational Expressions
 - B. Rational Exponents & Radical Expressions
 - C. Linear Equations
 - D. Quadratic Equations with rational solutions
- II. Equations and Inequalities
 - A. Quadratic Equations with irrational solutions
 - B. Complex Numbers
 - C. Quadratic Equations with complex solutions
 - D. Other Types of Equations
 - 1. Rational Equations
 - 2. Radical Equations
 - 3. Equations Quadratic in Form
 - E. Inequalities
 - F. Absolute Value Equations & Inequalities
- III. Graphs and functions
 - A. Graphing lines and curves
 - B. Function notation
 - C. Synthetic Division
 - D. Zeros of Polynomial Functions
 - E. Polynomial Functions: Graphs, Applications and Models
- IV. Exponential and Logarithmic Functions
 - A. Exponential Functions
 - B. Exponential Equations
 - C. Logarithmic Functions and Equations
- V. Systems and Matrices
 - A. Matrix solutions of Linear Systems
 - B. Nonlinear Systems of Equations

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate and apply knowledge of properties of functions, including domain and range, operations, compositions, and inverses.	EQ	During functions homework assignments, students will solve problems, identifying domain and range and showing all steps to the numerical or algebraic expression solutions to the problems. Solving problems on quizzes and tests will also be used to teach this learning outcome and will also require the same framework described.
2. Recognize and apply polynomial, rational, radical, exponential and logarithmic functions and solve related equations.	CT CM EQ	Homework requiring written solutions of polynomial, rational, radical, exponential and logarithmic equations will be assigned and graded upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many slightly new situations. Students will need to choose among several approaches and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also be used to teach this outcome and will require the same format for problems.
3. Apply graphing techniques	CM EQ	Written homework assignments requiring graphs of functions will be graded on students' step-by-step justification for his/her solution. The structure and organization of their justification and the connection to the type of function being graphed along with the accuracy of the numerical calculations and the conclusion(s) drawn will figure into the grade assigned for each problem. Solving graphing problems on quizzes and tests will also be used to teach this outcome and will require the same format for problems.

4. Evaluate all roots of higher degree polynomial and rational functions.	CT CM EQ	Students will be assigned to turn in homework problems requiring them to find all roots of higher degree polynomial and rational functions. They will be required to show step-by-step justifications for their results and to choose among the several methods of solutions of equations to find the roots of the functions and to connect the solutions of equations to the roots of the functions. Good mechanics, organization, and logic, as well as the accuracy of the written presentation will determine a grade on each problem. Solving such problems on quizzes and tests will also be used to teach this outcome and will require the same format for problems.
5. Recognize, solve and apply systems of linear equations using matrices.	CT CM EQ	Matrix solutions of systems of linear equations will be connected to graphical solutions of systems. Then homework problems requiring step-by-step row operations details will be assigned to be turned in and graded based on logical choices of row operations, readable mechanics, correct numerical calculations, proper organization, and accurate interpretation of results. Solving problems on quizzes and tests will also be used to teach this outcome and will also require the same format for problems.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor. Current methods include lecture, problem-solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, however, currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. Evaluation methods should include a minimum of three announced tests including a comprehensive final examination. Unit tests should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
--

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Mathematics for Business & Social Sciences

Prefix and Number: MATH 1324

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

The application of common algebraic functions, including polynomial, exponential, logarithmic, and rational, to problems in business, economics, and the social sciences are addressed. The applications include mathematics of finance, including simple and compound interest and annuities; systems of linear equations; matrices; linear programming; and probability, including expected value.

Prerequisites/Co-requisites:

Prerequisite: Prerequisite: TSI Algebra complete or successful completion of Intermediate Algebra (DEVL 0310). Successful completion of high school Geometry and Algebra II, or equivalent.

Topical Outline:

- I. Basic Algebra
 - A. Solving linear equations
 - B. Graphing linear equations on the coordinate plane
 - C. Solving systems of equations by elimination or substitution
 - D. Graphing systems of linear inequalities
- II. Matrices
 - A. Writing linear systems in matrix form
 - B. Gauss-Jordan elimination to solve systems of equations
- III. The Linear Programming Problem
 - A. Geometrically solving linear programming problems
 - B. Using the Simplex Method to solve linear programming problems.
- IV. Probability & Statistics Basics
 - A. Combinations and Permutations
 - B. Basic laws of probability
 - C. Expectation
- V. Mathematics of Finance and exponential and logarithmic functions (as time permits)
 - A. Compound Interest
 - B. Annuities

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Apply elementary functions, including linear, quadratic, polynomial, rational, logarithmic, and exponential functions to solving real-world problems.	CT CM EQ	Students will be assigned to turn in homework problems requiring them to solve and graph equations and use functions. They will be required to show step-by-step justifications for their results and to choose a logical method of solution that is clear and precise. They will need to connect the equations to the real-world problems that correspond. Good mechanics in written presentation, organization, and logic, as well as the accuracy of the written presentation will determine a grade on each problem. Solving these problems on quizzes and tests will also be used to teach this outcome and will require the same format for problems.
2. Solve mathematics of finance problems, including the computation of interest, annuities, and amortization of loans.	CT CM EQ	Homework requiring written matrix solutions of systems of linear equations will be assigned and graded upon each student's written step-by-step justification (row operations) for his/her solution, upon the organization apparent in their solution, and the connection of their written work to the lesson at hand. The principles will be applied to several different situations – including modeling of written problems with systems of equations and then solving with matrices. Logical choices of row operations, readable mechanics, correct numerical calculations, and accurate interpretation of results will be required. Solving problems on quizzes and tests will also be used to teach this topic and the same format for problems will be required.
3. Apply basic matrix operations, including linear programming methods, to solve application problems.	CT CM EQ	Homework requiring written matrix solutions of the linear programming problem will be assigned and graded upon each student's written step-by-step justification (choices of pivots and

		row operations) for his/her solution, upon the organization apparent in their solution, and the connection of their written work to the lesson at hand. The principles will be applied to several different situations – including modeling of written problems and then solving with matrices. Logical choices of pivots and row operations, readable mechanics, correct numerical calculations, and accurate interpretation of results will be required. Solving problems on quizzes and tests will also be used to teach this topic and the same format for problems will be required.
4. Demonstrate fundamental probability techniques and application of those techniques, including expected value, to solve problems.	CT CM EQ	Students will be assigned to turn in homework problems requiring them to solve basic probability problems. They will be required to show step-by-step evolution of their results and to choose a logical method of solution that is clear and precise. They will need to connect probabilities calculated to written problems that model real word situations. Good mechanics in written presentation, organization, and logic, as well as the accuracy of the quantitative measures and the written presentation will determine a grade on each problem. Solving these problems on quizzes and tests will also be used to teach this outcome and will require the same format for problems.
5. Demonstrate the ability to combine matrix and probability concepts to model practical applications.	CT CM EQ	Students will be assigned to turn in homework problems requiring them to solve basic probability problems. They will be required to show step-by-step evolution of their results and to choose a logical method of solution that is clear and precise. They will need to connect probabilities calculated to written problems that model real word situations. Good mechanics in written presentation, organization, and logic, as well as

		the accuracy of the quantitative measures and the written presentation will determine a grade on each problem. Solving these problems on quizzes and tests will also be used to teach this outcome and will require the same format for problems.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION:

Methods of instruction will vary with the instructor. Current methods include lecture, problem-solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION:

Methods of evaluation and weights given to these will vary with the instructor, however, currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. Evaluation methods should include a minimum of three announced tests including a comprehensive final examination. Unit tests should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Calculus for Business & Social Sciences

Prefix and Number: MATH 1325

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This course is the basic study of limits and continuity, differentiation, optimization and graphing, and integration of elementary functions, with emphasis on applications in business, economics, and social sciences. This course is not a substitute for MATH 2413, Calculus I.

Prerequisites/Co-requisites:

Prerequisite: MATH 1324 Mathematics for Business and Social Sciences or equivalent.

Topical Outline:

- I. Algebra review
 - A. Exponents and radicals
 - B. Evaluating functions and using function notation
- II. Derivatives
 - A. Finding 1st and 2nd derivatives of elementary functions
 - B. Applying derivatives to find maxima, minima and inflection points of graphs of functions
 - C. Applying derivatives to max-min written problems
 - D. Applying derivatives to marginal analysis problems, related rates, and applications in business and economics
- III. Logarithmic and Exponential functions
 - A. Finding derivatives of logarithmic and exponential functions
 - B. Implicit differentiation
- IV. Integration
 - A. Calculating indefinite integrals of some functions by formula or substitution
 - B. Solving separable differential equations and applying this to marginal analysis
 - C. Calculating definite integrals
- V. Multi-variable calculus
 - A. Finding partial derivatives of functions of two or more variables
 - B. Evaluating multiple integrals

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Apply calculus to solve business, economics, and social sciences problems.	CT CM EQ	Students will be assigned homework requiring them to solve indefinite integrals in order to use marginal cost, marginal revenue, and marginal profit functions to find total cost, revenue, and profit functions. They will apply definite integrals to find total income, present value and future value of continuous income streams and to find consumer's surplus and/or producer's surplus from demand and supply functions. Homework will include written solutions with step-by-step justification for the solutions. It will also be graded based upon the logic of the written work and upon the mechanics of a correct solution, the organization apparent in the solutions, and connection of the written work to the lesson at hand. Each application will be used in several slightly different situations. Students will need to choose among several formulas and methods and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems.
2. Apply appropriate differentiation techniques to obtain derivatives of various functions, including logarithmic and exponential functions.	CT CM	Homework requiring written solutions including finding derivatives and applying them will be assigned and graded based upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of correct solutions, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each formula will be applied to many slightly new situations. Students will need to choose among the several formulas and methods and to relate new

		material to older established mathematical methods. Solving these problems on quizzes and tests will also require the same format for problems.
3. Solve application problems involving implicit differentiation and related rates.	CT CM EQ	Students will be assigned homework requiring them to solve indefinite integrals in order to use marginal cost, marginal revenue, and marginal profit functions to find total cost, revenue, and profit functions. They will apply definite integrals to find total income, present value and future value of continuous income streams and to find consumer's surplus and/or producer's surplus from demand and supply functions. Homework will include written solutions with step-by-step justification for the solutions. It will also be graded based upon the logic of the written work and upon the mechanics of a correct solution, the organization apparent in the solutions, and connection of the written work to the lesson at hand. Each application will be used in several slightly different situations. Students will need to choose among several formulas and methods and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems.
4. Solve optimization problems with emphasis on business and social sciences applications.	CT CM EQ	Students will be assigned homework requiring them to solve indefinite integrals in order to use marginal cost, marginal revenue, and marginal profit functions to find total cost, revenue, and profit functions. They will apply definite integrals to find total income, present value and future value of continuous income streams and to find consumer's surplus and/or producer's surplus from demand and supply functions. Homework will include written solutions with step-by-step justification for the

		<p>solutions. It will also be graded based upon the logic of the written work and upon the mechanics of a correct solution, the organization apparent in the solutions, and connection of the written work to the lesson at hand. Each application will be used in several slightly different situations. Students will need to choose among several formulas and methods and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems.</p>
5. Determine appropriate technique(s) of integration.	CT CM EQ	<p>Students will be assigned homework requiring them to solve indefinite integrals in order to use marginal cost, marginal revenue, and marginal profit functions to find total cost, revenue, and profit functions. They will apply definite integrals to find total income, present value and future value of continuous income streams and to find consumer's surplus and/or producer's surplus from demand and supply functions. Homework will include written solutions with step-by-step justification for the solutions. It will also be graded based upon the logic of the written work and upon the mechanics of a correct solution, the organization apparent in the solutions, and connection of the written work to the lesson at hand. Each application will be used in several slightly different situations. Students will need to choose among several formulas and methods and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems.</p>
6. Integrate functions using the method of integration by parts or substitution, as appropriate.	CT CM EQ	<p>Students will be required to submit homework consisting of written step-by-step justifications for their</p>

		<p>solutions to indefinite integrals. Their work will also be graded based on the logic of their written work and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Students will need to choose among the several formulas and methods and to decide whether a substitution is needed to make the formula fit the problem at hand. Each principle will be applied to many slightly different situations. Students will need to relate the new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems.</p>
<p>7. Solve business, economics, and social sciences applications problems using integration techniques.</p>	<p>CT CM EQ</p>	<p>Students will be assigned homework requiring them to solve indefinite integrals in order to use marginal cost, marginal revenue, and marginal profit functions to find total cost, revenue, and profit functions. They will apply definite integrals to find total income, present value and future value of continuous income streams and to find consumer's surplus and/or producer's surplus from demand and supply functions. Homework will include written solutions with step-by-step justification for the solutions. It will also be graded based upon the logic of the written work and upon the mechanics of a correct solution, the organization apparent in the solutions, and connection of the written work to the lesson at hand. Each application will be used in several slightly different situations. Students will need to choose among several formulas and methods and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems.</p>

Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor. Current methods include lecture, problem-solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, however, currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. Evaluation methods should include a minimum of three announced tests including a comprehensive final examination. Unit tests should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Contemporary Mathematics I

Prefix and Number: MATH 1332

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

In-depth study and applications of introductory treatments of sets, logic, number systems, number theory, relations, functions, probability and statistics. Additional topics involving rudimentary statistics may be included.

Prerequisites/Co-requisites:

Prerequisite: TSI non-algebra complete or successful completion of Intermediate Algebra (DEVL 0310).

Topical Outline:

- Week 1 Introduction; Set Concepts
- Week 2 Subsets; Venn Diagrams
- Week 3 More Venn Diagrams; Applications of Sets
- Week 4 Infinite Sets;
- Week 5 Statements and Logical Connectives; Truth Tables
- Week 6 More Truth Tables; Equivalent Statements
- Week 7 Symbolic Arguments; Euler Diagrams; Syllogistic Arguments
- Week 8 Systems of Numeration
- Week 9 More Systems of Numeration; Other Bases
- Week 10 Computation in Other Bases; Number Theory
- Week 11 Integers
- Week 12 Rational Numbers
- Week 13 Irrational Numbers; Real Numbers and their Properties
- Week 14 Arithmetic and Geometric Sequences; Fibonacci Sequence
- Week 15 Review
- Week 16 Final Exam

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Students will be able to construct and analyze Venn diagrams involving two or three sets, and use them to solve problems and draw conclusions.	CT CM	Homework will include being able to analyze Venn diagrams involving more than one set, solving problems and drawing conclusions based on real world applications. Using inductive, deductive reasoning conjecture and counterexamples. Understanding of charts, graphs, and problem-solving procedures.
2. Students will be able to construct truth tables for statements involving negation, conjunction, and disjunction, conditional and bi-conditional.	CT CM EQ	Homework requiring written ability to translate statements into symbols and words. Construct truth tables and be able to interpret these in real life situations.
3. Students will be able to write the four variations of the conditional statement.	EQ	Written homework assignments will require students to be able to write four variations of conditional statements using formal symbolic logic.
4. Students will be able to convert base ten numbers to other bases. Perform the operations of addition, subtraction and multiplication in base two, base five and base eight.	EQ	Students will be assigned homework that will require the ability to convert numbers to different bases and to perform the operations of addition, subtraction and multiplication.
5. Students will be able to solve problems involving arithmetic and geometric sequences and series.	CT CM EQ	Assigned homework will include the use of solving problems in arithmetic and geometric sequences and series as it relates to real world application.
6. Students will be able to interpret and communicate quantitative information and mathematical and statistical concepts using language appropriate to the context and intended audience.	CT CM	Read and interpret authentic texts such as advertisements, consumer information, government forms, and newspaper articles containing quantitative information, including graphical displays of quantitative information. These texts may be as long as a standard magazine article and will include comparisons, analysis, and synthesis of multiple forms or sources of quantitative information. Write 1 to 2 pages using quantitative information to synthesize information from

		multiple sources or to make or critique an argument.
7. Students will be able to make sense of problems, develop strategies to find solutions, and persevere in solving them.	CM CT EQS	Develop an answer to an open-ended question requiring analysis and synthesis of multiple calculations, data summaries, and/or models. Students will be expected to develop their own process with support from peers and the instructor.
8. Students will be able to reason, model, and draw conclusions or make decisions with mathematical, statistical, and quantitative information.	CM CT EQS	Students will draw conclusions or make decisions in quantitatively based situations that are dependent upon multiple factors and will analyze how different situations would affect the decisions with written or verbal justifications of decisions, including appropriate discussion of the mathematics involved.
9. Students will be able to critique and evaluate quantitative arguments that utilize mathematical, statistical, and quantitative information.	CM CT EQS	Students will evaluate the validity and possible biases in arguments presented in authentic contexts based on multiple sources of quantitative information (e.g., advertising, internet postings, consumer information, political arguments).
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor. Current methods include lecture, problem-solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these

will vary with the instructor; however, currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. Evaluation methods should include a minimum of three announced tests including a comprehensive final examination. Unit tests should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Statistics

Prefix and Number: MATH 1342

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Collection, analysis, presentation and interpretation of data, and probability. Analysis includes descriptive statistics, correlation and regression, confidence intervals and hypothesis testing. Use of appropriate technology is recommended.

Prerequisites/Co-requisites:

A student must be TSI Complete.

Topical Outline:**I. Introduction**

- A. Parametric and nonparametric statistical procedures
- B. Levels of measurement
- C. Descriptive and inferential statistics
- D. Graphs and frequency distributions

II. Averages and Variation

- A. Measures of central tendency: mean, median, and mode
- B. Variance and standard deviation
- C. Grouped data
- D. Measures of position

III. Elementary probability and the binomial probability distribution

- A. Probability
- B. Binomial probabilities

IV. Normal Distributions and Sampling Distributions

- A. Standard scores
- B. Percentages under the normal curve
- C. Central Limit Theorem

V. Confidence intervals

- A. Large samples
- B. Small samples
- C. Proportions

VI. Hypothesis Testing

- A. Statistical tests
 - 1. Null hypotheses and alternative hypotheses
 - 2. Level of significance and the region of rejection
 - 3. One-tailed and two-tailed tests for hypotheses
- B. Testing the mean

VI. Correlation and Regression

- A. Linear correlation
- B. Linear regression

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Explain the use of data collection and statistics as tools to reach reasonable conclusions.	CT CM	Homework assignments requiring students to explain the use of data collection and statistics as tools to reach reasonable conclusions will be assigned. These assignments will require clear written explanations and will be assessed based on logical justification for student responses, on the organization apparent in their writing and the connection of their written work to the lesson at hand. Several different applications will be assessed. Students will need to choose among several different statistical measures in their descriptions and justifications.
2. Recognize, examine and interpret the basic principles of describing and presenting data.	CT CM EQ	Homework requiring students to recognize, examine, and interpret the basic principles of describing and presenting data will be assigned. These assignments will require students to distinguish between different types of data in identifying essential information needed to solve problems and written organization using steps in producing tables and graphs to evaluate given data. Students will need to calculate quantitative values such as measures of central tendency and variation to assess various aspects of the data as well as recognize the distribution shape of the data.
3. Compute and interpret empirical and theoretical probabilities using the rules of probabilities and combinatorics.	CT CM EQ	Homework requiring written solutions of problems computing and interpreting probabilities will be required and students will submit their work for evaluation based on their step-by-step justification for their solutions, upon the logic of their written work, and upon the mechanics of correct solution, the organization apparent in their solutions, and the connection of their written work to the lesson at hand. Each principle

		will be applied to several different situations. Students will need to choose among several formulas and to relate the new probability formulas to older established mathematical methods. This learning activity requires student to use quantitative measures to make informed decision regarding significance of data. Problem solutions of quizzes and tests will require the same format and thus are also part of the learning activities for this learning outcome.
4. Explain the role of probability in statistics.	CT CM EQ	Homework requiring students to understand the role of probability in statistics will be assigned. These assignments will require students to identify essential information in determining the appropriate method of calculating the probability for various types of problems. The calculations of these measures will help students make informed decisions regarding the significance of the data. Students will be required to write explanations describing the conditions of the various problems and how those circumstances effect the calculations of their probabilities.
5. Examine, analyze and compare various sampling distributions for both discrete and continuous random variables.	CT EQ	Homework requiring students to examine, analyze, and compare various sampling distributions for both discrete and continuous random variables. These assignments will require students to produce probability distributions and identify essential information to classify the type of random variable pertaining to the given problem. Students will be required to use several formulas specify to the sampling distribution to calculate quantitative measures to make informed decisions regarding the significance of the data and reach conclusions based upon the nature of the problem. In addition to the formulas, students will be required to make connections

		between concepts necessary to calculate probabilities using tables to solve various types of problems.
6. Describe and compute confidence intervals.	CT CM EQ	Homework requiring students to describe and compute confidence intervals will be assigned. These assignments will require students to understand the process of estimating values about a population based on the information obtained from a sample. Students will be required to identify essential information given in the problem to calculate and use quantitative measures of estimates to make informed decisions regarding the population. These assignments will require students to examine the given problem to make connections between specific values given or not and determine the appropriate sampling distribution used to calculate the confidence intervals to solve various types of problems. Students will be required to give a written conclusion of the confidence interval calculations based on the sample size and the assessment of the confidence level given in the problem.
7. Solve linear regression and correlation problems.	EQ	Homework requiring students to solve linear regression and correlation problems will be assigned. These assignments will require students to identify essential information to create graphs and calculate quantitative measures to determine the strength and the direction of the relationship between or among the variables as well as determining the regression to make informed decisions regarding the trend and predictions on the basis of the data. Students will be required to evaluate the data and graphs to reach conclusions based on present conditions or on the premise that present trends will continue and consider whether influential observations should be included in

		the final analysis of the data.
8. Perform hypothesis testing using statistical methods.	CM EQ	Homework requiring students to perform hypothesis testing using statistical methods will be assigned. These assignments will require students to understand the basic concepts of the decision-making process for evaluating claims about the population. Students will be required to write statements of the particular hypotheses being investigated and perform calculations of quantitative measures necessary for the appropriate statistical test to make informed decisions regarding the significance of the data to reach a conclusion based upon the hypothesis being tested. These assignments will require students to give a written conclusion of the findings and final decision based on the hypothesis. test used to solve the problem and evaluate the reasonableness of the solution.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit tests should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor, but currently used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Fundamentals of Mathematics I

Prefix and Number: MATH 1350

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This course covers mathematical topics necessary for elementary school teachers of middle grades (4 through 8) as designated by NCTCM standards. This is a required part of the approved field of study curriculum for middle grades teacher certification. It may also be appropriate for early childhood education majors. Topics covered include: mathematical reasoning, sets, whole numbers & number theory, integers, rational numbers, decimals and percents & real numbers. The course emphasizes manipulatives, modeling, problem solving, critical thinking and technology.

Prerequisites/Co-requisites:

Prerequisite: MATH 1314 College Algebra or equivalent.

Topical Outline:

- I. Problem Solving
 - A. Comparing and contrasting patterns to identify a plan for solving problems
 - B. Solving problems with algebra
- II. Sets, Functions & Reasoning
 - A. Using sets and Venn Diagrams to organize a problem
 - B. Graphing linear functions
 - C. Using deductive reasoning to organize and solve a simple problem
- III. Whole Numbers & Number Theory
 - A. Other numeration systems
 - B. Our base 10 Whole Numbers and their arithmetic
 - C. Factors and multiples
 - D. Greatest common divisors and least common multiples
- IV. Integers and Fractions
 - A. Integers and integer arithmetic
 - B. Fractions and operations with fractions
- V. Decimals: Rational and Irrational Numbers
 - A. Decimals and Rational Numbers and operations with them
 - B. Ratio and percent and scientific notation
 - C. Irrational Numbers and Real Numbers

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. The student should learn to apply the development of the real number system to problem solving and critical thinking.	CT CM EQ	Homework, Class Activities, and Tests will require students to submit written solutions to problems showing step-by-step justifications for their solutions. Work will also be evaluated on the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many slightly different situations. Students will need to choose among several approaches and to relate new material to older established mathematical methods.
2. Students will learn to write a lesson plan and implement the lesson plan through either an oral or written presentation.	CM	Group Presentation (Oral) or Written Presentation will be used for students to learn to write and implement lesson plans. Work will be evaluated on the structure and organization of the lesson plans. The lesson plans will need to be constructed in a way to show a connection with the main topic and content of which is being taught. The lesson plans will need to show proper mechanics and accuracy of the content.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor, but currently used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit test should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
--

Prepared by Jenny Cooper	Signature Jenny Cooper	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Fundamentals of Mathematics II

Prefix and Number: MATH 1351

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This course covers mathematical topics necessary for elementary school teachers of middle grades (4 through 8) as designated by NCTCM standards. This is a required part of the approved field of study curriculum for middle grades teacher certification. It may also be appropriate for early childhood education majors. Topics covered include: mathematical reasoning, sets, whole numbers & number theory, integers, rational numbers, decimals and percents & real numbers. This course emphasizes manipulatives, modeling, problem solving, critical thinking and technology.

Prerequisites/Co-requisites:

Prerequisite: MATH 1350 Fundamentals of Mathematics I

Topical Outline:

- I. Statistics
 - A. Describing and analyzing data
 - B. Graphing data and making predictions
 - C. Using sampling, predictions, and simulations
- II. Probability
 - A. Single-stage experiments
 - B. Multistage experiment
- III. Geometric Figures
 - A. Plane figures
 - B. Polygons and tessellations
 - C. Space figures
 - D. Symmetric figures
- IV. Measurement
 - A. Using various systems of measurement
 - B. Area and perimeter of plane figures
 - C. Volume and surface area of three dimensional figures
- V. Motions in Geometry
 - A. Using congruence and constructions to solve problems
 - B. Congruence mappings
 - C. Similarity mappings

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. The student should learn to use statistics to describe, graph and analyze data.	CT CM EQ	Homework, quizzes, presentations, and tests will require students to describe, graph and analyze data, producing written work which will be evaluated on each student's step-by-step justification for his/her work, upon the logic or their written analysis, and upon the mechanics of a correct conclusion, the organization apparent in their solution, and the connection of their work to the lesson at hand. Each principle will be applied to many slightly different situations. Students will need to choose among several approaches and to relate new material to older established mathematical methods. Students will use quantitative measures (electronic, graphical, tabular, and numerical) to make informed decisions regarding the significance of the data analyzed.
2. The student should learn to use probability to study and explain single-stage and multistage experiments.	CT CM EQ	homework, quizzes, presentations, and tests
3. The student should learn to use geometry and measurement to study and explain real problems.	CT CM EQ	homework, quizzes, presentations, and tests
4. The student should learn skills necessary for middle grades teacher certification.	CT CM EQ	homework, quizzes, presentations, and tests
5. The student should learn to use manipulatives and technology to help young students learn about mathematics.	CT CM EQ	homework, quizzes, presentations, and tests
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor, but currently used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit test should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Jenny Cooper	Signature Jenny Cooper	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Pre-Calculus

Prefix and Number: MATH 2312

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

In-depth combined study of algebra, trigonometry, and other topics for calculus readiness. Begins with topics from plane trigonometry including circular functions, solutions of right triangles, graphs, identities, solving trigonometric equations and the use of scientific calculators. Either a programmable or a non-programmable calculator is required. The course will include topics from analytical geometry.

Prerequisites/Co-requisites:

Prerequisite: MATH 1314; **or** 2 years of H.S. algebra **and** one of the following: TSI complete.

Topical Outline:

- I. Trigonometric Functions
 - A. Evaluating trigonometric functions
 - B. Solving right triangles
 - II. Circular Functions
 - A. Radian Measure
 - B. The unit circle and circular functions
 - C. Graphs of circular functions
 - III. Trigonometric Identities and Equations
 - A. Trigonometric identities
 - B. Inverse trigonometric functions
 - C. Trigonometric equations
 - IV. Applications
 - A. Law of Sines
 - B. Law of Cosines
 - C. Vectors *
 - D. Polar Coordinates *
 - V. Analytic Geometry
 - A. Parabolas *
 - B. Ellipses *
 - C. Hyperbolas *
- *As time permits.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate and apply knowledge of properties of functions.	CM EQ	Written homework assignments requiring evaluation and graphing of functions will be graded on students' step-by-step justification for his/her solution. The structure and organization of their justification and the connection to the type of function being evaluated or graphed along with the accuracy of the numerical calculations and the conclusion(s) drawn will figure into the grade assigned for each problem. Solving problems on quizzes and tests will also require the same format for problems.
2. Recognize and apply algebraic and transcendental functions and solve related equations.	CT CM EQ	Homework requiring written solutions of algebraic and transcendental function equations will be assigned and graded upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many different situations. Students will need to choose among several approaches and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems.
3. Apply graphing techniques to algebraic and transcendental functions.	CM EQ	Written homework assignments requiring graphs of trigonometric functions will be graded on students' step-by-step justification for his/her solution, identification of key concepts such as amplitude, period, phase shift, etc. The structure and organization of their justification and the connection to the type of function being graphed along with the accuracy of the numerical calculations and the conclusion(s) drawn will figure

		into the grade assigned for each problem. Solving problems on quizzes and tests will also require the same format for problems.
4. Compute the values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians.	CM EQ	Written homework assignments requiring computation of exact values of trigonometric functions for key angles in all quadrants of the unit circle measured in both degrees and radians will be graded based on students' step-by-step justification for his/her solutions. The structure and organization of their justification and the connection to the type of function being evaluated along with the accuracy of the numerical calculations and the conclusion(s) drawn will figure into the grade assigned for each problem. Solving problems on quizzes and tests will also require the same format for problems.
5. Prove trigonometric identities.	CT CM EQ	Homework requiring written proofs of trigonometric identities will be assigned and graded upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct proof, the organization apparent in the proof, and the connection of their written work to the lesson at hand. Each identity will be applied to several different situations. Students will need to choose among several approaches and to relate new material to older established identities and mathematical methods. Proving identities on quizzes and tests will also require the same format.
6. Solve right and oblique triangles.	CT CM EQ	Homework requiring written solutions of right triangles and later oblique triangles will be assigned and graded upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the

		connection of their written work to the lesson at hand. Each solution method (Law of Sines and/or Law of Cosines or other trigonometric methods or algebraic methods) will be applied to several different situations. Students will need to choose among several approaches and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information .

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor, but currently used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit test should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Linear Algebra

Prefix and Number: MATH 2318

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Introduces and provides models for application of the concepts of vector algebra. Topics include finite dimensional vector spaces and their geometric significance; representing and solving systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion; matrices; determinants; linear transformations; quadratic forms; eigenvalues and eigenvector; and applications in science and engineering.

Prerequisites/Co-requisites:

Prerequisite: MATH 2414 Calculus II

Topical Outline:

- I. Linear Equations in Linear Algebra
 - A. Systems of Linear Equations
 - B. Row Reduction and Echelon Forms
 - C. Vector Equations
 - D. The Matrix Equation, $A\mathbf{x} = \mathbf{b}$
 - E. Solution sets of Linear Systems
 - F. Linear Independence
 - G. Linear Transformations
- II. Matrix Algebra
 - A. Matrix operations
 - B. Inverse of a Matrix
 - C. Characterizations of Invertible Matrices
 - D. Subspaces of \mathbb{R}^n
 - E. Dimension and Rank
 - F. Introduction to Determinants
 - G. Properties of Determinants
 - H. Cramer's Rule, Volume, Linear Transformations
- III. Eigenvectors and Eigenvalues
 - A. Eigenvectors and Eigenvalues
 - B. The Characteristic Equation
 - C. Diagonalization
- IV. Orthogonality and Least Squares
 - A. Inner Product, Length, and Orthogonality
 - B. Orthogonal Sets
 - C. Orthogonal Projections
 - D. Least Squares Problems
- V. Symmetric Matrices and Quadratic Forms
 - A. Diagonalization of Symmetric Matrices
 - B. Quadratic Forms

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal

	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Be able to solve systems of linear equations using multiple methods, including Gaussian elimination and matrix inversion.	CT CM EQ	Homework requiring solution of systems of linear equations by elimination and by matrix inversion as well as row reduction and echelon forms will be assigned and graded upon each student's written step-by-step justification for his/her solution. The work will also be assessed based on the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each method will be applied to many slightly different problems. Students will need to choose among the several approaches and to relate new material to older established mathematical methods from calculus and algebra. Solving problems on quizzes and tests will also require the same format for problems and will thus also qualify as learning activities for this outcome.
2. Be able to carry out matrix operations, including inverses and determinants.	CT CM EQ	Homework requiring matrix operations, matrix inversion, and the determinant of a matrix will be assigned and assessed based upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many slightly different problems. Students will

		<p>need to choose among the several methods and approaches and to relate new material to older established mathematical methods from calculus and algebra. Solving problems on quizzes and tests will also require the same format for problems and thus will also be used as learning activities for this outcome.</p>
<p>3. Demonstrate understanding of the concepts of vector space and subspace.</p>	<p>CT CM EQ</p>	<p>Homework requiring written determination of the rank and dimension of a vector space and subspace will be assigned and assessed based upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many slightly different situations. Students will need to choose among several approaches and to relate new material to older established mathematical methods from calculus and algebra. Solving these problems on quizzes and tests will require the same format and thus will also serve as learning activities for this outcome.</p>
<p>4. Demonstrate understanding of linear independence, span, and basis.</p>	<p>CT CM EQ</p>	<p>Homework requiring students to write detailed solutions showing linear independence of vectors and finding the span and basis of a vector space will be assigned and assessed based upon each student's written step-by-step justification for his/her work, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each application will be applied to several slightly different problems. Students will need to choose among several approaches and to relate new material to older established mathematical methods</p>

		from calculus and algebra, as well as to the newer concepts. Some, but not all, applied problems will be included on tests and/or quizzes, and where they are included, they will require the same format and will constitute learning activities for this outcome.
5. Be able to determine eigenvalues and eigenvectors and solve problems involving eigenvalues.	CT CM EQ	Homework requiring students to write detailed solutions finding eigenvalues and eigenvectors and solving problems involving eigenvalues will be assigned and assessed based upon each student's written step-by-step justification for his/her work, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each application will be applied to several slightly different problems. Students will need to choose among several approaches and to relate new material to older established mathematical methods from calculus and algebra, as well as to the newer concepts. Some, but not all, applied problems will be included on tests and/or quizzes, and where they are included, they will require the same format and will constitute learning activities for this outcome.
6. Apply principles of matrix algebra to linear transformations.	CT CM EQ	Homework requiring students to write detailed solutions applying eigenvectors to linear transformations relative to a single basis will be assigned and assessed based upon each student's written step-by-step justification for his/her work, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each application will be applied to several slightly different problems. Students will need to choose among several approaches

		and to relate new material to older established mathematical methods from calculus and algebra, as well as to the newer concepts. Some, but not all, applied problems will be included on tests and/or quizzes, and where they are included, they will require the same format and will constitute learning activities for this outcome.
7. Demonstrate application of inner products and associated norms.	CT CM EQ	Homework requiring students to write detailed solutions applying inner products will be assigned and assessed based upon each student's written step-by-step justification for his/her work, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each application will be applied to several slightly different problems. Students will need to choose among several approaches and to relate new material to older established mathematical methods from calculus and algebra, as well as to the newer concepts. Some, but not all, applied problems will be included on tests and/or quizzes, and where they are included, they will require the same format and will constitute learning activities for this outcome.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#) Lay, David C; "Linear Algebra and Its Applications" 4th edition; Pearson Publishing Co.; ISBN 0321385179; 2011.

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor, but currently used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit test should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Differential Equations

Prefix and Number: MATH 2320

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Ordinary differential equations, including linear equations, systems of equations, equations with variable coefficients, existence and uniqueness of solutions, series solutions, singular points, transform methods, and boundary value problems; application of differential equations to real-world problems.

Prerequisites/Co-requisites:

Prerequisite: MATH 2414 Calculus II

Topical Outline:

- I. Differential Equations of Order One
 - A. Solving separable differential equations of order one by separation of variables
 - B. Solving differential equations of order one with homogeneous coefficients
 - C. Solving exact differential equations of order one
 - D. Solving first order linear differential equations
- II. Additional Topics on Equations of Order One
 - A. Integrating factors found by inspection
 - B. Integrating factors found by formula
 - C. Substitutions
 - D. Solving Bernoulli's equations
- III. Homogeneous Linear Differential Equations with Constant Coefficients
 - A. Evaluating differential operators of functions.
 - B. Solving homogeneous differential equations which are linear by use of the auxiliary equation and differential operators
- IV. Non-homogeneous Linear Differential Equations
 - A. Solving non-homogeneous differential equations by the method of undetermined coefficients
 - B. Solving non-homogeneous differential equations by reduction of order
 - C. Solving non-homogeneous differential equations by variation of parameters
- V. Power Series Solutions
 - Solving differential equations by use of power series near ordinary points and near regular singular points
- VI. Laplace Transform Solutions
 - A. Finding Laplace transforms of elementary functions
 - B. Finding Laplace transforms of derivatives and derivatives of Laplace transforms
 - C. Solving differential equations by use of Laplace transforms and inverse Laplace transforms
 - D. Applying solutions of differential equations by Laplace transforms to initial value problems

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Identify homogeneous equations, homogeneous equations with constant coefficients, and exact and linear differential equations.	CT CM EQ	Homework requiring identification of the type of differential equation and therefore the applicable method will be assigned and graded upon each student's written step-by-step justification for his/her choice and his/her solution. The work will also be assessed based on the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each method will be applied to many slightly different problems. Students will need to choose among the several approaches and to relate new material to older established mathematical methods from calculus and algebra. Solving problems on quizzes and tests will also require the same format for problems and will thus also qualify as learning activities for this outcome.

<p>2. Solve ordinary differential equations and systems of equations using:</p> <ul style="list-style-type: none"> a) Direct integration b) Separation of variables c) Reduction of order d) Methods of undetermined coefficients and variation of parameters e) Series solutions f) Operator methods for finding particular solutions g) Laplace transform methods 	<p>CT CM EQ</p>	<p>Homework requiring written solutions of all the listed types of solutions of differential equations will be assigned and assessed based upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many slightly different problems. Students will need to choose among the several methods and approaches and to relate new material to older established mathematical methods from calculus and algebra. Solving problems on quizzes and tests will also require the same format for problems and thus will also be used as learning activities for this outcome.</p>
<p>3. Determine particular solutions to differential equations with given boundary conditions or initial conditions.</p>	<p>CT CM EQ</p>	<p>Homework requiring written differential equations solutions which are particular to given boundary conditions will be assigned and assessed based upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many slightly different situations. Students will need to choose among several approaches, to then apply the boundary conditions (or in the case of transform solutions to apply those boundary conditions first), and to relate new material to older established mathematical methods from calculus and algebra. Solving boundary value problems on quizzes and tests will require the same format and thus will also serve as learning activities for this</p>

		outcome.
4. Analyze real-world problems in fields such as Biology, Chemistry, Economics, Engineering, and Physics, including problems related to population dynamics, mixtures, growth and decay, heating and cooling, electronic circuits, and Newtonian mechanics.	CT CM EQ	Homework requiring students to write detailed solutions of real-world problems from science and statistics will be assigned and assessed based upon each student's written step-by-step justification for his/her work, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each application will be applied to several slightly different problems. Students will need to choose among several approaches and to relate new material to older established mathematical methods from calculus and algebra, as well as to the newer differential equations methods of solution. Some, but not all, applied problems will be included on tests and/or quizzes, and where they are included, they will require the same format and will constitute learning activities for this outcome.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor, but currently used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, and assigned homework problems.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit test should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Calculus I

Prefix and Number: MATH 2413

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	4	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Limits and continuity; the Fundamental Theorem of Calculus; definition of the derivative of a function and techniques of differentiation; applications of the derivative to maximizing or minimizing a function; the chain rule, mean value theorem, and rate of change problems; curve sketching; definite and indefinite integration of algebraic, trigonometric, and transcendental functions, with an application to calculation of areas.

Prerequisites/Co-requisites:

Prerequisite: MATH 2412 Pre-Calculus Math or equivalent

Topical Outline:**I. Limits**

A. Definition of limit:

B. Limit Theorems:

C. Continuity:

II. Derivatives

A. Definition:

B. Derivative Formulas:

C. Higher Order Derivatives:

D. Velocity and Acceleration:

E. Chain Rule

F. Derivatives of Trigonometric Functions:

G. Implicit Differentiation:

H. Related Rate Problems:

I. Differentials

III. Applications of Derivatives

A. Maxima and Minima:

B. Max-Min Written Problems:

C. Concavity and Points of Inflection:

D. Asymptotes:

E. Curve Sketching:

IV. Integration

A. Anti-derivatives:

B. Fundamental Theorem of Integral Calculus:

C. Indefinite Integrals:

D. Integration and Substitution

E. Area Between Graphs of Functions

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<p>1. Develop solutions for tangent and area problems using the concepts of limits, derivatives, and integrals.</p>	<p>CT CM EQ</p>	<p>On homework assignments, students will be required to find equations of tangent lines using derivatives (and occasionally using limits) and to calculate areas between curves using integrals and limits. They will learn to write step-by-step justification for their solutions, and their work will also be graded on the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to several different situations. Students will need to choose among several approaches and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems and will thus also serve to teach the topic.</p>
<p>2. Draw graphs of algebraic and transcendental functions considering limits, continuity, and differentiability at a point.</p>	<p>CT CM EQ</p>	<p>Students will work homework problems using first and second derivative tests and limits to find critical points, relative extrema, and inflection points and to sketch the graphs of algebraic and transcendental functions. These homework problems will require written step-by-step justification for students' conclusions, and will also be graded on the logic of their written work, the mechanics of correct solutions, and the connection to the lesson at hand. Each principle will be applied to several different situations. Students will need to choose between different approaches and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format and will thus also</p>

		be an avenue for students to learn this material.
3. Determine whether a function is continuous and/or differentiable at a point using limits.	CM EQ	Written homework assignments requiring students to determine continuity and/or differentiability of a function at a particular point will also be graded based on the structure and organization of the students' justifications and the connection to the type of function being considered along with the accuracy of the numerical calculations and the conclusion(s) drawn. Solving these problems on quizzes and tests will also require the same format for problems and thus will also serve to teach this topic.
4. Use differentiation rules to differentiate algebraic and transcendental functions.	CT EQ	Homework problems using differentiation rules will require students to choose a formula, detail how the problem was solved using that formula in a step-by-step justification for conclusions drawn. Problems will require students to apply differentiation rules to many different situations and to verify the reasonableness of the solutions. Solving these problems on quizzes and tests will also require the same format for problems and thus will also serve to teach this topic.
5. Identify appropriate calculus concepts and techniques to provide mathematical models for real-world situations and determine solutions to applied problems.	CT EQ	Homework problems finding maximums, minimums, and related rates will require students to choose methods and "tests", and formulas and to detail how the problem was solved in a step-by-step justification for conclusions drawn. Problems will require students to apply differentiation rules and first and second derivative tests to many different situations and to verify the reasonableness of the solutions. Solving these problems on quizzes and tests will also require the same format for problems and thus will also serve to teach this topic.

6. Evaluate definite integrals using the Fundamental Theorem of Calculus.	CT CM EQ	Students will be assigned to turn in homework problems evaluating definite integrals. They will be required to show step-by-step justifications for their results and to choose among the several integral formulas and to apply the Fundamental Theorem of Calculus in order to reach a correct solution. Their work will also be graded based on the logic of their written work, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many slightly different situations. Students will use both new and old material and will need to make and identify connections. Solving problems on quizzes and tests will also require the same format for problems and thus will also be part of their learning activities.
7. Articulate the relationship between derivatives and integrals using the Fundamental Theorem of Calculus.	CM	Homework, quizzes and tests will require students to submit written work using and articulating the relationship between derivatives and integrals due to the Fundamental Theorem of Calculus. The structure, logic and organization of their work and the connection to the main topic of their work will also be used to evaluate this topic.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF INSTRUCTION: Methods of Instruction will vary with the instructor but commonly used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, assigned homework problems, and use of microcomputers in graphing functions.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit tests should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
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Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Calculus II

Prefix and Number: MATH 2414

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	4	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Differentiation and integration of transcendental functions; parametric equations and polar coordinates; techniques of integration; sequences and series; improper integrals.

Prerequisites/Co-requisites:

Prerequisite: MATH 2413 Calculus I

Topical Outline:

- I. Applications of Integrals
 - A. Areas between curves
 - B. Volumes by slicing (disc or washer method)
 - C. Volumes by peeling (shell or cylinder method)
 - D. Work
- II. Methods of Integration
 - A. Integration by Parts
 - B. Partial Fractions
 - C. Powers and Products of Trigonometric Functions
 - D. Trigonometric Substitution
 - E. Rational Expressions in $\sin x$ and $\cos x$
 - F. Rationalizing Substitutions
 - G. Improper Integrals
- III. Infinite Series
 - A. Sequences
 - B. Infinite Series
 - 1. Definition of the Sum of an Infinite Series
 - 2. Tests for Convergence or Divergence of Infinite Series
 - 3. Absolute Convergence and Conditional Convergence
 - 4. Power Series
 - 5. Maclaren's Series, Taylor's Polynomials, and Taylor's Series
- IV. Parametric Equations and Polar Coordinates
 - A. Parametric Equations
 - 1. graphing parametric equations both by plotting points and by recognizing established forms.
 - 2. finding the area bounded by parametric equation curves.
 - 3. finding the length of parametric curves on a given interval for the parameter
 - 4. finding the surface area of a surface of revolution when a parametric curve is rotated about a line.
 - B. Polar Coordinate Equations
 - 1. graphing polar coordinate equations by formulas and by plotting points from the equations.
 - 2. finding intersections of polar curves by eliminating r between the two equations and solving the resulting trigonometric equations for Θ .
 - 4. finding area inside the graph of a polar coordinate equation for a given interval of values for Θ by use of an integral formula.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Use the concepts of definite integrals to solve problems involving area, volume, work, and other physical applications.	CT EQ	Students will produce written homework setting up and solving definite integral problems involving area, volume and work. This will involve applying the concepts of definite integrals to new situations and evaluating the reasonableness of the solution. Detailed step-by-step solutions will include choosing appropriate integral formulas for evaluating their solution and correctly interpreting their results. Problems on quizzes and tests will also follow the same format and thus will also contribute to students' learning of this topic.
2. Use substitution, integration by parts, trigonometric substitution, partial fractions, and tables of anti-derivatives to evaluate definite and indefinite integrals.	CT CM EQ	Methods of integration homework problems will be assigned and graded upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each method will be applied to many different situations.

		<p>Students will need to choose among several approaches (formulas, substitution and formulas, integration by parts, trigonometric substitution, partial fractions, or tables of anti-derivatives) more than one of which may work. Students will need to relate the new material to older established integration methods. Solving integral problems on quizzes and tests will also require the same format for problems and will thus also be a learning activity for students.</p>
3. Define an improper integral.	CT EQ	<p>Students will be assigned to solve and turn in homework problems requiring evaluation of improper integrals and on quizzes and tests will also follow the same format and are thus part of the learning activities for this topic.</p>
4. Apply the concepts of limits, convergence, and divergence to evaluate some classes of improper integrals.	CT EQ	<p>Students will be assigned to solve and turn in homework problems requiring evaluation of improper integrals using the concepts of limits, convergence and divergence. They will justify their step-by-step solutions to three different classes of improper integrals choosing among many different integration formulas from previously mastered material. Evaluating improper integrals (or concluding that they diverge) on quizzes and tests will also follow the same format and are thus part of the learning activities for this topic.</p>
5. Determine convergence or divergence of sequences and series.	CT EQ	<p>Students will be assigned to work and turn in homework problems requiring the determination of convergence, conditional convergence or divergence of sequences and infinite series. They will justify their step-by-step solutions for sequences by finding limits where they exist or concluding that they do not exist. They will justify their step-by-step solutions for infinite series by referencing and showing applicability of one or more of</p>

		<p>several “tests” for convergence (Comparison test, Limit Comparison test, Integral test, P Series test, Geometric Series test, Alternating Series Test, Nth Term test, and others). Solutions of problems on quizzes and tests will require the same format and thus will also constitute learning activities for this outcome.</p>
<p>6. Use Taylor and Maclaurin series to represent functions.</p>	EQ	<p>Students will turn in homework assignments solving problems requiring them to represent given functions with Taylor and/or Maclaurin series. Solutions will require step-by-step development using derivatives and Taylor’s Theorem. Students will have to identify applicable derivative formulas from earlier calculus work and to apply them. Solutions of problems on quizzes and tests will require the same format and thus will also constitute learning activities for this outcome.</p>
<p>7. Use Taylor or Maclaurin series to integrate functions not integrable by conventional methods.</p>	CT EQ	<p>Homework assignments will include problems requiring students to replace functions which are non-integrable by formulas, substitutions, or standard conventional methods of integration with Taylor series and to then integrate each term of the series by integrating the nth term, resulting in another infinite series for a solution. Students will include complete step-by-step justification for their work. This type of problem requires students to apply the new principle of Taylor’s Theorem to the old concept of integration in order to widen the field of integrable functions. Students will still have to choose among integral formulas and among tests for convergence to establish intervals of convergence for the integral. Problems on quizzes and tests will also follow the same format and will thus also serve as appropriate learning activities for this outcome.</p>

8. Use the concept of polar coordinates to find areas, lengths of curves, and representations of conic sections.	CT CM EQ	Homework problems finding areas between polar coordinate curves and lengths of curves of polar coordinate equations will require students to write step-by-step solutions, detailing with proper structure the logical justifications for their solutions. They will also be graded upon the mechanics of an accurate solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Formulas for areas and lengths of curves in polar coordinates will be related to older established formulas for areas and lengths of curves in Cartesian coordinates. Students will have to choose among many integral and derivative formulas and several trigonometric identities in order to complete their solutions. Problems on quizzes and tests will also follow the same format and will thus also be part of the learning activities used to teach this learning outcome.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor, but commonly used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, assigned homework problems, and use of microcomputers in graphing functions.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit tests should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Calculus III

Prefix and Number: MATH 2415

Division – Department: Science & Mathematics - Math

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	4	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Advanced topics in calculus, including vectors and vector-valued functions, partial differentiation, Lagrange multipliers, multiple integrals, and Jacobians; application of the line integral, including Green's Theorem, the Divergence Theorem, and Stokes' Theorem.

Prerequisites/Co-requisites:

Prerequisite: MATH 2414 Calculus II

Topical Outline:

I. Vectors

A. Vector arithmetic

1. finding a vector joining any two given points.
2. finding the magnitude and direction of any vector.
3. finding a unit vector in the direction of any vector.
4. finding the sums and differences of vectors.
5. finding dot product and cross product of two vectors.
6. using dot product to find the angle between vectors and the component of one vector in the direction of another.
7. using cross product to find a vector perpendicular to the plane of two vectors.

B. Equations of Lines and Planes

1. finding the equations of lines using vectors parallel to the line.
2. finding the equations of planes using vectors perpendicular to the plane.

C. Vector Functions

1. differentiating vector functions.
2. finding unit vectors tangent or normal to a curve defined by a vector function.
3. finding velocity and acceleration vectors for position vector functions.
4. finding the tangential and normal components of acceleration for position vector functions.
5. finding the curvature function for position vector functions.

D. Partial Differentiation

1. finding first and second and higher order partial derivatives of functions of two or more variables.
2. finding directional derivatives.
3. finding the gradient of a function of several variables and using it to find tangent planes and normal lines to the graphs of the functions.

E. Multiple Integrals

1. evaluating double and triple integrals in Cartesian coordinates.
2. evaluating double and triple integrals in Polar and Cylindrical coordinates.
3. evaluating triple integrals in Spherical coordinates.
4. using double and triple integrals to find area, volume, and surface area.
5. converting double and triple integrals from one coordinate system to another.

F. Vector Calculus

1. differentiating and integrating vector functions used

- to define vector fields
- 2. evaluating line integrals by parameterization of path.
- 3. using Green's Theorem to evaluate line integrals by converting to iterated double integrals.
- 4. evaluating surface integrals.
- 5. using the Divergence Theorem.
- 6. using Stokes Theorem.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Perform calculus operations on vector-valued functions, including derivatives, integrals, curvature, displacement, velocity, acceleration, and torsion.	CT CM EQ	Homework requiring written solutions of problems involving vector-valued functions will assigned and graded on each student's step-by-step justification for his/her solution, on the logic of their written work, and on the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to several situations. Students will need to choose among several approaches and to relate the new material to older established derivative and integral formulas and established mathematical methods. Since solving problems on quizzes and

		tests will require the same format, these will also be used as learning activities for this outcome.
2. Perform calculus operations on functions of several variables, including partial derivatives, directional derivatives, and multiple integrals.	CM EQ	Written homework assignments requiring derivatives and integrals of functions of several variables will be assigned and turned in by students. These will include the students' step-by-step justifications for their solutions. The structure and organization of their justification and the connection to the lesson at hand along with the accuracy of the work and the conclusion(s) drawn will figure into the grade assigned for each problem. Solving problems on quizzes and tests will also require the same format, and so they will also be used as learning activities for this outcome.
3. Find extrema and tangent planes.	CT CM EQ	Homework requiring written solutions of problems asking for relative and absolute extrema and for equations of tangent planes to three dimensional surfaces will be assigned and graded based upon each student's written step-by-step justification for his/her solution, upon the logic of their written work, and upon the mechanics of a correct solution, the organization apparent in their solution, and the connection of their written work to the lesson at hand. Each principle will be applied to many slightly different situations. Students will need to choose among several approaches and to relate new material to older established mathematical methods. Solving problems on quizzes and tests will also require the same format for problems and quizzes and tests will also be part of the learning activities for this outcome.
4. Solve problems using the Fundamental Theorem of Line Integrals, Green's Theorem, the Divergence Theorem, and Stokes' Theorem.	CT CM EQ	Homework consisting of written solutions to problems requiring students to use line integrals, Green's Theorem, the Divergence Theorem, and Stokes' Theorem will be assigned. Students will

		provide written justification for their solutions and will have to apply each principle to several different situations. Solving these problems will require students to make connections to the Fundamental Theorem of Line Integrals and to choose methods and formulas from older mathematical methods. Students' will submit correct, organized and structured work and will use logical progression of the problem to connect the problem to the main topic being studied. Problems on quizzes and tests will also follow the same format and will also be used as learning activities for this outcome.
5. Apply the computational and conceptual principles of calculus to the solutions of real-world problems.	CT	Homework requiring written solutions to "word problems" that approximate real-world problems will be assigned. Students at this level finally have the mathematical skills to begin to attempt real-world problems. Students will need to submit detailed step-by-step solutions and justifications for their work. They will apply new principles and old principles to many situations. Students will have to make connections between old and new principles and to choose which mathematical methods are applicable.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
--

METHODS OF INSTRUCTION: Methods of instruction will vary with the instructor, but commonly used methods include lecture, problem solving discussion, handouts summarizing material, individualized problem solving assistance, assigned homework problems, and use of microcomputers in graphing functions.

METHODS OF EVALUATION: Methods of evaluation and weights given to these will vary with the instructor, but currently used methods include announced unit tests, unannounced quizzes, homework, and a comprehensive final examination. The evaluation methods should include at least three announced tests including a comprehensive final examination. Unit tests should count at least 50% of the student's grade and the combination of unit tests and final examination should count at least 70% of the student's grade.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
--

Prepared by Nancy Long	Signature Nancy Long	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Music Appreciation

Prefix and Number: MUSI 1306

Division – Department: Speech & Fine Arts - Music

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This course focuses on the enjoyment and understanding of music through lecture, live and recorded music, and videos. The course emphasizes the elements of music and acquaintance with a variety of forms, styles, and composers. Attendance at one live musical event is required.

Prerequisites/Co-requisites:

None

Topical Outline:

Unit 1: Introduction to the Elements of Music

Unit 2: Medieval/Renaissance

Unit 3: Baroque

Unit 3: Classical

Unit 4: Romantic

Unit 5: 20th Century

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Students will demonstrate sensitivity to differing points of view through a group project that results in a shared perspective.	TW	Students will be divided into groups and assigned a topic on which they will make an oral/visual presentation to the class. Each student will be assigned a particular area to cover (ex. historical background, musical output, etc.) based on the topic assigned.
2. Students will be exposed to cultural performances.	CT CM	The students will be required to write a critique of the music and the performance of the concert attended. This critique will include an historical background of the musical literature, language and terminology appropriate to the subject matter, and supported opinion of the performance.

3. Students will demonstrate mastery of communication skills in appreciation of music.	CM	<p>The students will be required to write a critique of the music and the performance of the concert attended. This critique will include an historical background of the musical literature, language and terminology appropriate to the subject matter, and supported opinion of the performance.</p> <p>Students will be divided into groups and assigned a topic on which they will make an oral/visual presentation to the class. Each student will be assigned a particular area to cover (ex. historical background, musical output, etc.) based on the topic assigned</p>
4. Students will demonstrate social responsibility.	SR	<p>The arts are vital components of a society's culture, health and vigor. Therefore, it is essential, whenever cultural events are available in a community, that those events be attended by a broad spectrum of the community's citizens. Attendance at the events demonstrates active social responsibility because it ensures that such activities can continue to be offered in the future. Therefore, students will be required to attend one outside musical event during the semester.</p>
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF EVALUATION: Generally, attendance and participation (10%), homework assignments (10%), major project presentation (20%), tests (40%), and final exam (20%). May vary with instructor.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
--

Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Department Head Byron McGilvray	Signature Byron McGilvray	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Music Literature

Prefix and Number: MUSI 1307

Division – Department: Speech & Fine Arts - Music

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A broad study of representative composers and compositions from all major style periods. Music terminology is applied to instrumental and vocal forms from secular and sacred music using recorded and live performances. A research project is required. This course is designed for music majors or advanced music students.

Prerequisites/Co-requisites:

None

Topical Outline:

Unit 1: Musical Elements, Timbre, Texture

Unit 2: Musical Form

Unit 3: Medieval Music

Unit 3: Renaissance

Unit 4: Baroque

Unit 5: Classical

Unit 6: Romantic

Unit 7: Impressionist

Unit 8: 20th Century

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Students will demonstrate sensitivity to differing points of view through a group project that results in a shared perspective.	TW	Students will be divided into groups and assigned a topic on which they will make an oral/visual presentation to the class. Each student will be assigned a particular area to cover (ex. historical background, musical output, etc.) based on the topic assigned.
2. Students will be exposed to cultural performances.	CT CM	The students will be required to write a critique of the music and the performance of the concert attended. This critique will include an historical background of the musical literature, language and terminology appropriate to the subject matter, and supported

		opinion of the performance.
3. Students will demonstrate mastery of communication skills in appreciation of music.	CM	<p>The students will be required to write a critique of the music and the performance of the concert attended. This critique will include an historical background of the musical literature, language and terminology appropriate to the subject matter, and supported opinion of the performance.</p> <p>Students will be divided into groups and assigned a topic on which they will make an oral/visual presentation to the class. Each student will be assigned a particular area to cover (ex. historical background, musical output, etc.) based on the topic assigned</p>
4. Students will demonstrate social responsibility.	SR	<p>The arts are vital components of a society's culture, health and vigor. Therefore, it is essential, whenever cultural events are available in a community, that those events be attended by a broad spectrum of the community's citizens. Attendance at the events demonstrates active social responsibility because it ensures that such activities can continue to be offered in the future. Therefore, students will be required to attend one outside musical event during the semester.</p>
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF EVALUATION: The course grade will be comprised of performance on daily assignments (100 points), tests (300 points), listening tests (100 points), and attendance at outside concerts (100 points), totaling 600 points.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
--

Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Department Head Byron McGilvray	Signature Byron McGilvray	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: American Music

Prefix and Number: MUSI 1310

Division – Department: Speech & Fine Arts - Music

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

General survey of various styles of music in America. Topics may include jazz, ragtime, folk, rock, and contemporary art music.

Prerequisites/Co-requisites:

None

Topical Outline:

Unit 1: Introduction - Elements

Unit 2: The 1920s, 1930s, '40s

Unit 3: The 1950s

Unit 4: The 1960s

Unit 5: The 1970s

Unit 6: The 1980s & Beyond

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Students will demonstrate sensitivity to differing points of view through a group project that results in a shared perspective.	TW	Students will be divided into groups and assigned a topic on which they will make an oral/visual presentation to the class. Each student will be assigned a particular area to cover (ex. historical background, musical output, etc.) based on the topic assigned.
2. Students will be exposed to cultural performances.	CT CM	The students will be required to write a critique of the music and the performance of the concert attended. This critique will include an historical background of the musical literature, language and terminology appropriate to the subject matter, and supported opinion of the performance.

3. Students will demonstrate mastery of communication skills in appreciation of music.	CM	<p>The students will be required to write a critique of the music and the performance of the concert attended. This critique will include an historical background of the musical literature, language and terminology appropriate to the subject matter, and supported opinion of the performance.</p> <p>Students will be divided into groups and assigned a topic on which they will make an oral/visual presentation to the class. Each student will be assigned a particular area to cover (ex. historical background, musical output, etc.) based on the topic assigned</p>
4. Students will demonstrate social responsibility.	SR	<p>The arts are vital components of a society's culture, health and vigor. Therefore, it is essential, whenever cultural events are available in a community, that those events be attended by a broad spectrum of the community's citizens. Attendance at the events demonstrates active social responsibility because it ensures that such activities can continue to be offered in the future. Therefore, students will be required to attend one outside musical event during the semester.</p>
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
--

METHODS OF EVALUATION: Generally, attendance and participation (10%), homework assignments (10%), major project presentation (20%), tests (40%), and final exam (20%). May vary with instructor.

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
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Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Department Head Byron McGilvray	Signature Byron McGilvray	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Introduction to Ethics

Prefix and Number: PHIL 2306

Division – Department: Social Sciences - Philosophy

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

The systematic evaluation of classical and/or contemporary ethical theories concerning the good life, human conduct in society, morals, and standards of value.

Prerequisites/Co-requisites:

None

Topical Outline:**1) HISTORY OF THE ETHICAL DECISION MAKING PROCESSES AND HOW THEY AFFECT AND INFLUENCE THE SOCIETY OF TODAY.**

- a) The students will be able to explain an academic as well as a workable definition of Ethics.
- b) They will be able to understand and explain why some cultural dilemmas can be Legal and yet Unethical and others can be Illegal and yet Ethical.
- c) They will be able to differentiate between ethics and feelings, religion, law and science.
- d) They will be able to see how the input of the great Philosophers of history have influenced Ethical decision making.
- e) Students will be able to articulate the main proponents of Ethical Systems such as Cultural Relativism, Utilitarianism, Situation Ethics, Egoism, Biblical Ethics and Altruism.
- f) They will learn the working tenants through a Decision Making Model.

2) APPLICATION OF THE CURRENT ETHICAL MODELS UPON SOME OF THE MAJOR CULTURAL DILEMMAS AFFECTING OUR SOCIETY OF TODAY.

- a) Abortion -- The Law and the Dilemma
- b) Euthanasia -- Mercy or Murder
- c) Capital Punishment -- Justice or Revenge
- d) War -- Justified or Unjustified
- e) Sexuality -- Personal Choice or Media Driven
- f) Homosexuality -- Choice or Genes
- g) Cohabitation -- Society Driven or Personal Preference
- h) Artificial Reproduction -- Assistance or Selection
- i) Cloning -- Man Controlled or Interfering
- j) Drugs/Alcohol -- Peer Pressure or Habit

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Read, analyze, and critique philosophical texts.	CT	Students may synthesize concepts, ethical approaches and applications of ethical criterion through assigned texts and through major media.
2. Define and appropriately use important terms such as relativism, virtue, duty, rights, utilitarianism, natural law, egoism, altruism, autonomy, and care ethics.	CM	Students will analyze a specific social ethical dilemma of the day and define, explain and delineate how the various ethical decision positions could affect the impact of that specific social dilemma.
3. Demonstrate knowledge of major arguments and problems in ethics.	CM SR	Students will apply specific critical decision making criterion to a major ethical issue facing the culture/society of this day. Students will analyze how that unique position, if society driven, could either improve or harm culture.
4. Present and discuss well-reasoned ethical positions in writing.	CT CM	Students will synthesize and delineate how a chosen ethical decision, when applied to a specific social issue, could impact the culture of today.
5. Apply ethical concepts and principles to address moral concerns.	CT SR	Students will research and synthesize how a specific moral concern of today is analyzed through the eyes of major ethical decision making philosophies.
6. Apply course material to various aspects of life.	PR	Students will be challenged to be introspective on major moral issues impacting culture/society today and then discern & articulate how course material affected their initial thought position.
7. Discuss ways of living responsibly in a world where people have diverse ethical beliefs.	CM SR	Students will interact corporately to ways in which holding a specific ethical position could affect a world view and how society might be influenced.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Lecture, Power Point Presentations, Video, Student Interaction and Student Survey

METHODS OF EVALUATION: Applied Student Surveys, Position Paper, Class Interaction, Exams, Final Exam

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Dr. Bob Price	Signature Bob Price	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: College Physics I

Prefix and Number: PHYS 1401

Division – Department: Science & Mathematics - Physics

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

An introductory college Physics course for life science and non-science majors who are not required to have calculus based physics. Topics covered include Newtonian mechanics, gravitation, energy, mechanical properties of gases and fluids, heat, and the laws of thermodynamics. Requires proficiency in introductory algebra. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: Math 1416 Plane Trigonometry **or** MATH 2412 Pre-Calculus Math
Co-requisite: Laboratory for PHYS 1401 College Physics I

Topical Outline:

A. Mechanics

1. Kinematics

- a. Vector addition, subtraction and multiplication
- b. Metric units
- c. Definition and calculation of the displacement, velocity, and acceleration of a particle as a function of time for a particle moving in one or two dimensions

2. Dynamics

- a. Newton's three laws of Motion
- b. Momentum of a system of particles
- c. conservation of momentum principle
- d. Work, kinetic energy, and potential energy
- e. Conservation of energy principle
- e. Equilibrium

3. Rotational Motion

Angular displacement, velocity, centripetal force and centripetal acceleration for an object moving in a circle

B. Thermodynamics

- 1. Celsius and Kelvin temperature scales
- 2. Heat needed to raise the temperature or change the state of any solid or liquid
- 3. Effects the addition or removal of heat from an object will have on the physical properties of the object
- 4. Heat transfer

C. Laboratory

- 1. The student will demonstrate his ability to follow written and oral instructions in setting up and using simple scientific equipment in order to obtain data in the laboratory.
- 2. The student will use his knowledge of physical theory gained in lecture in order to analyze the data taken in laboratory, and report his results in written form.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<u>LECTURE</u>		
1. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration.	CT2,5 CM2 EQ1-3	Solve homework or test problems on linear motion. Analyze problems stated in English, identify essential information, choose proper physical principles to apply to the problem, and solve the problem mathematically, showing important steps in the solution. Selected problems involving vectors will require solution using the structure of graphical vector methods.
2. Apply Newton's laws to physical problems including gravity.	CT2,5 CM2 EQS1-3	Solve homework or test problems on Newton's laws. Analyze problems stated in English, identify essential information, choose proper physical principles to apply to the problem, and solve the problem mathematically, showing important steps in the solution. Selected problems involving vectors will require solution using the structure of graphical vector methods.

3. Solve problems using principles of energy.	CT EQ	Solve homework or test problems on energy. Analyze problems stated in English, identify essential information, choose proper physical principles to apply to the problem, and solve the problem mathematically, showing important steps in the solution.
4. Use principles of impulse and linear momentum to solve problems.	CT EQ	Solve homework problems and test problems on momentum.
5. Solve problems in rotational kinematics and dynamics, including the determination of the location of the center of mass and center of rotation for rigid bodies in motion.	CT EQ	Solve homework problems on rotational motion.
6. Solve problems involving rotational and linear motion.	CT EQ	Solve homework and test problems on rotational motion.
7. Describe the components of a wave and relate those components to mechanical vibrations, sound, and decibel level.	CT EQ	Solve homework and test problems on vibrations and waves.
8. Demonstrate an understanding of equilibrium, including the different types of equilibrium.	CT EQ	Solve homework and test problems on equilibrium.
9. Discuss simple harmonic motion and its application to quantitative problems or qualitative questions.	CT EQ	Solve homework problems on simple harmonic motion.
10. Solve problems using the principles of heat and thermodynamics.	CT EQ	Solve homework problems on thermodynamics.
11. Solve basic fluid mechanics problems.	CT EQ	Solve homework and lab problems on fluids.
<u>LAB</u>		
12. Demonstrate techniques to set up and perform experiments, collect data from those experiments, and formulate conclusions from an experiment.	CM3 TW1,3	Students will perform lab experiments in groups of 2 to 4 students. Participation of each student in the data collection will be required. Student will be required to analyze data and relate results to theory discussed in lecture.
13. Record experimental work completely and accurately in laboratory notebooks, and communicate experimental results clearly in written	CM2,5	Each student will complete laboratory handouts, including data tables, and report results in written laboratory reports. Reports will be evaluated on several criteria

reports.		to include proper format and accuracy of results.
14. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration.	CM TW	Perform motion experiments to measure acceleration of gravity in groups of 2 to 4 students. Each person will report results in a written laboratory report.
15. Apply Newton's laws to physical problems including gravity.	CM TW	Perform experiments to measure properties of waves in groups of 2 to 4 students. Each person will report results in written form.
16. Solve problems using principles of energy.	CM TW	Perform experiments to measure equilibrium conditions in groups and each person will report results in written form.
17. Describe the components of a wave and relate those components to mechanical vibrations, sound, and decibel level.	CM TW	Perform group experiments relating to heat and thermodynamics and each student will report results in written form.
18. Use principles of impulse and linear momentum to solve problems.	CM TW	Perform experiment on Archimedes principle and report results in written form.
19. Solve problems in rotational kinematics and dynamics, including the determination of the location of the center of mass and center of rotation for rigid bodies in motion.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.

20. Solve problems involving rotational and linear motion.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
21. Demonstrate an understanding of equilibrium, including the different types of equilibrium.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
22. Discuss simple harmonic motion and its application to quantitative problems or qualitative questions.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
23. Solve problems using the principles of heat and thermodynamics.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics,

		structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
24. Solve basic fluid mechanics problems.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION:

1. There will be three hours per week used for lectures and demonstrations. These will parallel the presentation of material in the textbook. Lectures will include mathematical descriptions of theories and solution of example problems. Demonstrations will illustrate physical principles as appropriate.
2. Homework reading assignments and problem assignment will be given from the textbook on a daily basis and student questions over this material will be discussed in lecture.
3. There will be a three hour weekly laboratory session. The students will work in small groups to perform demonstration experiments which will illustrate or extend concepts discussed in class. Each student will write a laboratory report concerning each experiment.

4. There will be regular tests given in lecture (approximately 3 to 5 per semester) to reinforce the students comprehension of the material discussed in the lecture section.

METHODS OF EVALUATION:

1. There will be regular homework assignments which will be collected and graded.
2. There will be a laboratory report written for each experiment performed.
3. There will be at least one test given over each major area of study: physics and chemistry.
4. There will be a comprehensive final exam.

The final grade will be computed on the following basis: Major tests: approximately 50%

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Jim Guillory	Signature Jim Guillory	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: College Physics II

Prefix and Number: PHYS 1402

Division – Department: Science & Mathematics - Physics

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

This is the second semester of a survey of Physics for liberal arts, technical and life science majors. This course will cover electricity, magnetism, wave motion, and selected topics in modern physics. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: PHYS 1401 College Physics I or consent of instructor.
Co-requisite: Laboratory for PHYS 1402 College Physics II

Topical Outline:

A. Waves

1. Mechanical Waves

- a. Describe and identify transverse and longitudinal waves.
- b. Describe waves in terms of wavelength, speed and frequency.
- c. Describe the basic properties of sound waves.

2. Light Waves

- a. Describe the basic properties of light as a wave.
- b. Describe the effects of reflection, refraction and diffraction on light waves.
- c. Use the mirror equation and the thin lens equation to describe the operation of simple optical instruments.

B. Electricity

1. Static Electricity

- a. Describe the basic structure of the atom and its electrical characteristics.
- b. Calculate electrical forces using Coulomb's Law.
- c. Be able to map electric fields around static charges.
- d. Be able to define and calculate voltage.

2. Electrical Circuits

- a. Identify the basic elements in an electrical circuit and draw diagrams of circuits.
- b. Describe the function of batteries, resistors, capacitors and inductors.
- c. Use Ohm's Law and Kirchhoff's Laws to calculate the current, voltage relations in a circuit.

3. Magnetism

- a. Describe the cause of magnetic fields.
- b. Discuss the relationship between electrical charges and magnetic fields.
- c. Calculate the effect of magnetic fields on electrical charges.

C. Modern Physics

- a. Discuss and calculate the equivalence of mass and energy.
- b. Discuss the principles of radioactivity.
- c. Describe the electromagnetic nature of light and the photon as a wave/particle.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Solve problems involving the inter-relationship of fundamental charged particles, and electrical forces, fields, and currents.	CT2,5 CM2 EQS1-3	Solve homework and test problems involving positive and negative charges and the associated electrical forces, fields and electric currents. . Analyze problems stated in English, identify essential information, choose proper physical principles to apply to the problem, and solve the problem mathematically, showing important steps in the solution. Selected problems involving vectors will require solution using the graphical vector methods.
2. Apply Kirchhoff's Rules to analysis of circuits with potential sources, capacitance, inductance, and resistance, including parallel and series capacitance and resistance.	CT EQ	Solve homework and quiz problems utilizing Kirchhoff's Rules
3. Solve problems in the electrostatic interaction of point charges through the application of Coulomb's Law.	CT2,5 CM2 EQ1-3	Solve homework and quiz problems using Coulomb's Law. Analyze problems stated in English, identify essential information, choose proper physical principles to apply to the

		problem, and solve the problem mathematically, showing important steps in the solution. Selected problems involving vectors will require solution using the structure of graphical vector methods.
4. Solve problems involving the effects of magnetic fields on moving charges or currents, and the relationship of magnetic fields to the currents which produce them.	CT EQ	Solve homework and quiz problems involving magnetism.
5. Use Faraday's and Len's laws to determine electromotive forces and solve problems involving electromagnetic induction.	CT EQ	Solve homework and test problems involving Faraday and Lenz laws of electromagnetic induction.
6. Articulate the principles of reflection, refraction, diffraction, interference, and superposition of waves.	CT EQ	Solve wave problems on homework and/or tests involving reflection, refraction and diffraction.
7. Describe the characteristics of light and the electromagnetic spectrum.	CT EQ	Solve homework and test problems involving light and the electromagnetic spectrum.
<u>LAB</u>		
8. Develop techniques to set up and perform experiments, collect data from those experiments, and formulate conclusions from an experiment.	CM3 TW1,3	Students will perform lab experiments in groups of 2 to 4 students. Participation of each student in the data collection will be required. Student will be required to analyze data and relate results to theory discussed in lecture.
9. Demonstrate the collections, analysis, and reporting of data using the scientific method.	CM2,5	Each student will complete laboratory handouts, including data tables, and report results in written laboratory reports. Reports will be evaluated on several criteria to include proper format and accuracy of results.
10. Record experimental work completely and accurately in laboratory report forms, and communicate experimental results clearly in written reports.	CM	Each student will complete laboratory handouts, including data tables, and report results in written laboratory reports according to a standard form.

11. Solve problems involving the inter-relationship of fundamental charged particles, and electrical forces, fields, and currents.	EQ	
12. Apply Kirchhoff's Rules to analysis of circuits with potential sources, capacitance, inductance, and resistance, including parallel and series capacitance and resistance.	CT EQ TW	Perform experiments or lab exercises in small groups using Kirchhoff's rules and rules of series and parallel circuits, and report results in written form.
13. Solve problems in the electrostatic interaction of point charges through the application of Coulomb's Law.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
14. Solve problems involving the effects of magnetic fields on moving charges or currents, and the relationship of magnetic fields to the currents which produce them.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
15. Use Faraday's and Lenz's laws to determine electromotive forces and solve problems involving electromagnetic induction.	CT CM TW	Perform lab experiments in small groups involving electromagnetic induction, and report results in written form.
16. Solve problems applying the principles of reflection, refraction, diffraction, interference, and superposition of waves.	CM EQ TW	Perform lab experiments in small groups involving and report results in written form.

17. Solve practical problems involving optics, lenses, mirrors, and optical instruments.	CM TW	Perform experiments on reflection and refraction and report results in written form involving both diagrams and calculations.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Several teaching methods will be used in this course including:

1. There will be three (3) hours per week used for lectures and demonstrations. These will parallel the presentation of material in the textbook. Lectures will include mathematical descriptions of theories and solutions of example problems. Demonstrations will illustrate physical principles as appropriate.
2. Homework reading assignments and problem assignments will be given on a daily basis and student questions over this material will be discussed in lecture.
3. There will be a three (3) hour weekly laboratory session. The students will work in small groups to perform demonstration experiments which will illustrate or extend concepts discussed in class. Each student will write a laboratory report concerning each experiment.
4. There will be regular tests given in lecture (3-5 per semester) to reinforce the students comprehension of the material discussed in the lecture section.

METHODS OF EVALUATION:

1. There will be regular homework assignments which will be collected and graded.
2. There will be a laboratory report written for each experiment performed.
3. There will be three or four major unit exams.
4. There will be a comprehensive final exam.

The final grade will be computed on the following basis:

Major tests: approximately 50%

Laboratory reports: approximately 25%

Final Exam and homework: approximately 25%

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Jim Guillory	Signature Jim Guillory	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Physical Science I

Prefix and Number: PHYS 1415

Division – Department: Science & Mathematics - Physics

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A course designed for non-science majors. Topics include the nature of the Earth as revealed by astronomy, meteorology and geology. The nature and philosophy of science is illustrated and experienced by lectures, laboratory and self-paced instruction. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Co-requisite: Laboratory for PHYS 1415 Physical Science I

Topical Outline:

- A. Astronomy
 - a. heliocentric and geocentric theories
 - b. compare and contrast the planets in the solar system
 - c. life cycle of stars
 - d. Big Bang Theory
 - e. Earth – Moon system
- B. Meteorology
 - a. structure of the atmosphere
 - b. meteorological measurements
 - c. types of weather events
 - d. weather maps
 - e. precipitation (causes and types)
- C. Geology
 - a. minerals and rocks
 - b. rock cycle
 - c. volcanoes and earthquakes
 - d. continental drift and plate tectonics
 - e. geologic history
- D. Laboratory
 - a. set up and use simple scientific apparatus
 - b. analyze data and report the results

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. The student will compare and contrast the heliocentric and geocentric theories of the structure of the solar system.	CT2 CM5	The student will present an argument and provide justification in an essay or discussion question, the heliocentric and geocentric theories of the solar system. In their justifications the student will access the accuracy of each theory to observations of the sky.
2. The student will describe the structure and major bodies of the solar system.	CM4	The student will compare the properties of the planets to analyze their potential to support life in essay or discussion questions.
3. The student will describe the general life cycle of the Sun and other stars.	CM3	The student will describe and analyze the life cycle of various types of stars using a Hertzsprung Russell diagram and make the connection between the star's properties and their position on the diagram.
4. The student will describe the Big Bang theory and the evidence supporting the theory, including Hubble's Law.	CT2 CM5	The student will present an oral or written argument that provides justification and connects experimental evidence to the validity of the Big Bang theory.
5. The student will be able to describe the Earth, Moon, and Sun system and relate it to eclipses and tides.	CT1	The student will produce a diagram with the position of the Sun, Moon and Earth at major positions related to phases of the Moon and high or low tides.
6. The student will diagram the rock cycle, and describe the formation of igneous, sedimentary and metamorphic rocks.	CT1 CM3	The student will produce a diagram of the rock cycle and complete an oral or written presentation connecting the basic processes of rock formation to each type of rock.
7. The student will describe the theories of continental drift and plate tectonics and the evidence supporting these theories.	CT1 CT2 CT4 CM3 CM5	The student will produce a diagram depicting types of plate motion; present an argument via an oral or written presentation describing the theory of plate tectonics and providing justification through experimental evidence showing the accuracy and depth of knowledge of the theory; make connections between the type of land forms present on

		Earth and how they relate to plate motion through an oral or written presentation
8. The student will list the vertical layers in the atmosphere and the importance of each layer.	CM5	The student will complete an oral or written presentation showing the accuracy and depth of content that illustrates the basic layers of the Earth's atmosphere.
9. The student will describe, measure, and predict future weather conditions from the analysis of basic atmospheric measurements.	CT3 CM3 CM5 EQ3 TW2	The students will work in small groups and will be assessed on the results of their project of conducting an experiment to collect basic atmospheric measurements. The student will apply their data to forecast the weather and will complete an oral or written presentation connecting their results to real life.
10. The student will identify cloud types, and describe the formation of clouds, precipitation, and different types of storms.	CM5	The student will complete an oral or written presentation identifying cloud types, and relating the cloud type to storms. The student will be assessed on accuracy and depth of content.
11. The student will name and describe major types of air masses and fronts, and the weather associated with them.	CM5	The student will complete an oral or written presentation naming basic air masses and relating air mass characteristics to the type of weather caused by the mass and associated front. The student will be assessed on accuracy and depth of content.
12. The student will describe the concept of climate and related factors.	CT2 CM3 CM5	The student will present the argument of climate change and use scientific data to justify the current theories in climate research and present their findings in an oral or written presentation connecting the scientific data to climate change. The student will be assessed on their accuracy and depth of content.
LAB		
13. The student will demonstrate the ability to follow written and oral instructions in setting up and using simple scientific apparatus.	CT2 CT3 TW2	The students will work in groups of 2 to 4 students to collect experimental data and applying the principles of the course in the laboratory. The student will report the data in a standard format with the goal of solving the assigned problem. Distance learning students may share data using the

		internet. The students will be assessed on the synthesis of the final project within the group.
14. The student will apply scientific theories to analyze data collected in lab and report results in written form.	CT1 CT2 CT3 CM5 EQ1 EQ3 TW2	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

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Material/Technology to be supplied by the student:

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Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
METHODS OF EVALUATION:

A minimum of 3 exams, one of which may be a comprehensive final exam, testing the objectives is to be given. These assessments must make up at least 50% of the final grade. The final grade must be reflective of the students' understanding of all major topics in the course.

A minimum of 10 laboratory experiments must be performed by the student. These labs must make up at least 20% of the final grade.

No more than 30% of the final grade may be devoted to any other assignment. A total average grade of 70 must be obtained for a grade of C.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Jim Guillory	Signature Jim Guillory	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

The Administrative-Master Syllabus is an administrative tool and **not intended to be distributed to students.** It is the intention of this document to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by TVCC faculty, regardless of who teaches the course, the timeframe by which it is instructed and the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in improvement of instruction and demonstrate that there is consistency and comparability in the course.

Course Title: Physical Science II

Prefix and Number: PHYS 1417

Division – Department: Science & Mathematics - Physics

Course Type: select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A course designed for non-science majors. Topics include the nature of the universe as revealed by physics and chemistry. The nature and philosophy of science is illustrated and experienced by lectures, laboratory and self-paced instruction. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Co-requisite: Laboratory for PHYS 1417 Physical Science II

Topical Outline:

- A. Physics
 - a. Motion
 - b. Energy
 - c. Heat and Temperature
 - d. Waves and Sound
 - e. Electricity
- B. Chemistry
 - a. Atoms, Elements, and Compounds
 - b. Periodic Table
 - c. Bonding
 - d. Chemical Reactions
 - e. Organic Compounds
- C. Laboratory
 - a. set up and use simple scientific apparatus
 - b. analyze data and report the results

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Course Learning Objectives	Core Objective(s) Met	Suggested Learning Activities
LECTURE		
1. The student will apply the metric system to numerous experiments.	CT3 EQ1 EQ2 EQ3 EQ4 EQ5 TW2	The student will work in a team to make measurements and apply the results to a laboratory experiment. They will make calculations that solve problems showing all steps using the metric system in the lab. Assessment will be based on the results obtained.

2. The student will define and calculate properties of motion.	CT3 EQ1 EQ2 EQ3 EQ4 EQ5 TW2	The student will apply basic equations to calculate properties of motion. An experiment will be conducted in a group where the students will be assessed on their explanations detailing how solutions were arrived and the reasonableness of the answer.
3. The student will state Newton's laws and use them to analyze simple physical situations.	CT3 CM5 EQ1 EQ2 EQ3 EQ4 EQ5	The student will complete an oral or written presentation applying Newton's laws to a new situation where they will have to identify essential information and make an informed decision to solve a problem and will be assessed on the accuracy of the presentation which will include a detailed solution showing all steps and reached a proper conclusion based upon the data given.
4. The student will define and describe the relationships between work, power and energy.	CT3 CM5 EQ1 EQ2 EQ3 EQ4 EQ5	The student will complete an oral or written presentation applying the concepts of work, power, and energy to a new situation where they will have to identify essential information and make an informed decision to solve a problem and will be assessed on the accuracy of the presentation which will include a detailed solution showing all steps and reached a proper conclusion based upon the data given.
5. The student will define, describe and identify the basic characteristics of waves.	CM5 EQ1 EQ2 EQ3 EQ4 EQ5	The student will complete an oral or written presentation applying the concepts of waves where they will have to identify essential information and make an informed decision to solve a problem and will be assessed on the accuracy of the presentation which will include a detailed solution showing all steps and reached a proper conclusion based upon the data given.
6. The student will identify the basic electrical charges, basic electrical circuit elements, and relate Ohm's law to simple electrical circuits.	CT3 EQ3	The student will apply Ohm's law to a new situation that will include simple circuits and identify essential information to calculate current, voltage, or resistance.

LAB		
7. The student will describe the atom.	CM3	The student will complete an oral or written presentation that identifies protons, electrons and neutrons as the basic atomic particles and draw diagrams illustrating their positions in the atom.
8. The student will use the periodic table to identify the proton, electron and neutron numbers of each element.	CM3 EQ3	The student will complete an oral or written presentation that uses the periodic table and identify essential information to calculate the number of protons, neutrons and electrons in atoms and isotopes.
9. The student will describe ionic and covalent bonding.	CT3 CM5	The student will complete an oral or written presentation that applies different chemical principles to identify ionic or covalent bonding and be assessed on the accuracy of the presentation.
10. The student will balance simple chemical reactions.	CT3 CM5 EQ1 EQ3	The student will complete an oral or written presentation applying the law of conservation of mass to balance a chemical reaction by identifying the essential information given and evaluating the reasonableness of their solution. They will be assessed on their accuracy.
11. The student will identify and describe some basic organic compounds and their uses.	CT3 CM5 EQ1 EQ3	The student will complete an oral or written presentation identifying organic compounds. They will identify essential information from the rules of bonding to evaluate the reasonableness of their solutions.
12. The student will demonstrate the ability to follow written and oral instructions in setting up and using simple scientific apparatus.	CT2 CT3 TW2	The students will work in groups of 2 to 4 students to collect experimental data and applying the principles of the course in the laboratory. The student will report the data in a standard format with the goal of solving the assigned problem. Distance learning students may share data using the internet. The students will be assessed on the synthesis of the final project within the group.
13. The student will apply scientific theories to analyze data collected in lab and report results in written form.	CT1 CT2 CT3 CM5	The student will work in small groups to carry out or conduct an experiment and evaluate the reasonableness of their results. An

	EQ1 EQ3 TW2	oral or written presentation will be required and the accuracy, depth of content, and/or the connection of the content with the main topic will be assessed. The student will also be assessed on the synthesis of the project within the group.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
METHODS OF INSTRUCTION:

1. There will be three hours per week used for lectures, demonstrations and discussion. Student participation will be encouraged.
2. Homework reading and writing assignments will be made from the textbook.
3. There will be a three hour laboratory assignment each week to reinforce concepts discussed in lecture. Students will be expected to work in groups and individually on experiments and will submit written summaries of their results.
4. There will be regular tests given (approximately 3 to 5 per semester) to reinforce student comprehension of the material discussed in lecture.

METHODS OF EVALUATION:

1. There will be regular homework assignments which will be collected and graded.
2. There will be a laboratory report written for each experiment performed.
3. There will be at least one test given over each major area of study: physics and chemistry.
4. There will be a comprehensive final exam.

The final grade will be computed on the following basis:

Major tests: approximately 50% to 75%

Laboratory Reports: approximately 25%

Homework or special projects: approximately 25%

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Jim Guillory	Signature Jim Guillory	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: University Physics I

Prefix and Number: PHYS 2425

Division – Department: Science & Mathematics - Physics

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A calculus based study of mechanics and heat for science or mathematics majors and pre-engineering students. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: MATH 2413 Calculus I or consent of instructor.

Co-requisite: Laboratory for PHYS 2425 University Physics I

Topical Outline:

A. Mechanics

1. Kinematics

- a. The student will be able to solve problems involving vector addition, subtraction, and multiplication.
- b. The student will be able to express physical quantity studied in metric units.
- c. The student will be able to define and calculate the displacement, velocity, and acceleration of a particle as a function of time for a particle moving in one or two dimensions.

2. Dynamics

- a. The student will be able to state Newton's three laws of Motion, and be able to solve problems using these laws.
- b. The student will be able to calculate the momentum of a system of particles and to use the conservation of momentum principle to solve problems involving the collision of objects.
- c. The student will be able to define work, kinetic energy, and potential energy and use these concepts to solve problems.
- d. The student will be able to use the conservation of energy principle to solve problems.
- e. The student will be able to state the conditions for equilibrium for a particle and be able to solve for any force or torque acting on an object in equilibrium.

B. Thermodynamics

1. The student will be able to convert between the Celsius and Kelvin temperature scales.
2. The student will be able to calculate the heat needed to raise the temperature or change the state of any solid or liquid.
3. The student will be able to calculate the effects the addition or removal of heat from an object will have on the physical properties of the object.
4. The student will be able to describe the methods in any simple physical situation.

C. Laboratory

1. The student will demonstrate his ability to follow written and oral instruction in setting up and using simple scientific equipment in order to obtain data in the laboratory.
2. The student will use his knowledge of physical theory gained in lecture in order to analyze the data taken in laboratory, and report his results in written form.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
LECTURE		
1. Determine the components of linear motion (displacement, velocity, and acceleration), and especially motion under conditions of constant acceleration.	CT2,5 CM2 EQ1,2,3	Solve homework or test problems on linear motion. Analyze problems stated in English, identify essential information, choose proper physical principles to apply to the problem, and solve the problem mathematically, showing important steps in the solution. Selected problems involving vectors will require solution using the structure of graphical vector methods.
2. Solve problems involving forces and work.	CT EQ	Solve homework and test questions using Newton's laws of motion and principles of work and energy.
3. Apply Newton's laws to physical problems.	CT2,5 CM2 EQ1,2,3	Solve homework or test problems on Newton's laws. Analyze problems stated in English, identify essential information, choose proper physical principles to apply to the problem, and solve the problem mathematically, showing important steps in the solution. Selected problems involving vectors will require

		solution using the structure of graphical vector methods.
4. Identify the different types of energy.	CT EQ	Solve homework and test questions using the concept of conservation of energy.
5. Solve problems using principles of conservation of energy.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
6. Define the principles of impulse, momentum, and collisions.	CT EQ	Solve homework and test questions involving the conservation of momentum in collisions.
7. Use principles of impulse and momentum to solve problems.		
8. Determine the location of the center of mass and center of rotation for rigid bodies in motion.	CT EQ	Solve homework problems involving the center of mass of objects.
9. Discuss rotational kinematics and dynamics and the relationship between linear and rotational motion.	CT EQ	Solve homework and test problems involving rotational motion.
10. Solve problems involving rotational and linear motion.	CT EQ	Solve homework and test problems involving systems in equilibrium.
11. Define equilibrium, including the different types of equilibrium.	CT EQ	Solve homework and lab problems involving simple harmonic motion.
12. Discuss simple harmonic motion and its application to real-world problems.	CT EQ	Solve homework problems using the laws of thermodynamics.
LAB		
13. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner.	CM2,5	Each student will complete laboratory handouts, including data tables, and report results in written laboratory reports. Reports will be evaluated on several criteria to include proper format and accuracy of results.
14. Conduct basic laboratory experiments involving classical mechanics.	CM3 TW1,3	Students will perform lab experiments in groups of 2 to 4 students. Participation of each

		student in the data collection will be required. Student will be required to analyze data and relate results to theory discussed in lecture.
15. Relate physical observations and measurements involving classical mechanics to theoretical principles.	CM3	Students will answer lab experiment questions relating the experimental results to the theory discussed in lecture.
16. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements.	CM EQ	Students will calculate percent error and percent difference and discuss sources of error in written laboratory reports.
17. Design fundamental experiments involving principles of classical mechanics.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
18. Identify appropriate sources of information for conducting laboratory experiments involving classical mechanics.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: Several teaching methods will be used in this course including:

1. There will be three hours per week used for lectures and demonstrations. These will parallel the presentation of material in the textbook. Lectures will include mathematical descriptions of theories and solution of example problems. Demonstrations will illustrate physical principles as appropriate.
2. Homework reading assignments and problem assignments will be given from the textbook on a daily basis and student questions over this material will be discussed in lecture.
3. There will be a three hour weekly laboratory session. The students will work in small groups to perform demonstration experiments which will illustrate or will write a laboratory report concerning each experiment.
4. There will be regular tests given in lecture (approximately 3 to 5 per semester) to reinforce the students comprehension of the material discussed in the lecture section.

METHODS OF EVALUATION:

1. There will be regular homework assignments which will be collected and graded.
2. There will be a laboratory report written for each experiment performed.
3. There will be at least one test given over each major area of study: physics and chemistry.
4. There will be a comprehensive final exam.

The final grade will be computed on the following basis:

Major tests: approximately 50%

Laboratory Reports: approximately 25%

Homework and Final Exam: approximately 25%

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Jim Guillory	Signature Jim Guillory	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: University Physics II

Prefix and Number: PHYS 2426

Division – Department: Science & Mathematics - Physics

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	3	1

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A calculus based study of electricity, magnetism, waves, and optics for science or mathematics majors and pre-engineering students. A laboratory component is included that gives practical experience to material covered in class.

Prerequisites/Co-requisites:

Prerequisite: PHYS 2425 or consent of instructor.

Co-requisite: Laboratory for PHYS 2426 University Physics II

Topical Outline:

A. Electromagnetism

1. Static Electricity

- a. The student will be able to describe the basic structure of the atom and its electrical characteristics.
- b. The student will be able to state and use Coulomb's law for calculating the electrical force between charges.
- c. The student will be able to state and use Gauss's law to determine the electric fields around charges.
- d. The student will be able to define and calculate electrical potential energy and voltage.

2. Electrical Circuits

- a. The student will be able to describe the basic characteristics of electromotive forces, resistors, capacitors, and inductors in electrical circuits.
- b. The student will be able to state and use Ohm's law and Kirchhoff's rules to calculate current and voltage relationships in circuits.
- c. The student will be able to describe and recognize the differences between series and parallel circuits.
- d. The student will be able to describe the differences between DC and AC circuits.
- e. The student will be able to describe the current and voltage relationships in AC circuits and draw phasor diagrams for such circuits.

3. Electromagnetism

- a. The student will be able to discuss the basic cause of magnetic fields.
- b. The student will be able to state and use Faraday's Law and Ampere's law for solving problems.
- c. The student will be able to state Maxwell's Equations.

B. Waves

1. Mechanical Waves

- a. The student will be able to describe and give examples of transverse and longitudinal waves.
- b. The student will be able to calculate wave speed, frequency, and wave length.
- c. The student will be able to describe standing waves and calculate standing wave frequencies and wavelengths.

2. Electromagnetic Waves

- a. The student will be able to describe and electromagnetic wave and its cause.
- b. The student will be able to calculate wave speed, frequency, wavelength, and the Poynting Vector.
- c. The student will be able to use the law of reflection to solve problems.
- d. The student will be able to use the law of refraction to solve problems.
- e. The student will be able to use the principles of interference and diffraction gratings to solve problems.

C. Laboratory

1. The student will demonstrate his ability to follow written and oral instructions in setting up and using simple scientific equipment in order to obtain data in the laboratory.
2. The student will use his knowledge of physical theory gained in lecture in order to analyze the data taken in laboratory, and report his results in written form.

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
<u>LECTURE</u>		
1. Articulate the fundamental concepts of electricity and electromagnetism, including electrostatic potential energy, electrostatic potential, potential difference, magnetic field, induction, and Maxwell's Laws.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
2. State the general nature of electrical forces and electrical charges, and their relationship to electrical current.	CT EQ	Solve homework and test problems involving electric force, charge and current.
3. Solve problems involving the inter-relationship of electrical	CT2,5 CM2	Solve homework or test problems on linear motion. Analyze

charges, electrical forces, and electrical fields.	EQS1,2,3	problems stated in English, identify essential information, choose proper physical principles to apply to the problem, and solve the problem mathematically, showing important steps in the solution. Selected problems involving vectors will require solution using the structure of graphical vector methods.
4. Apply Kirchhoff's Laws to analysis of circuits with potential sources, capacitance, and resistance, including parallel and series capacitance and resistance.	CT2,5 CM2 EQS1,2,3	Solve homework, test or lab problems using Kirchhoff's rules for circuits. Analyze circuits, assign current directions to various circuit branches, develop equations to describe circuit relationships at junctions and around loops. Form a unique set of equations for each problem and solve for the variables. Report results in proper format of circuit variables.
5. Calculate the force on a charged particle between the plates of a parallel-plate capacitor.	CT EQ	Solve homework or test problems involving electric charges and capacitors.
6. Apply Ohm's law to the solution of problems.	CT EQ	Solve homework and test problems using Ohm's law.
7. Describe the effects of static charge on nearby materials in terms of Coulomb's Law.	CT2,5 CM2 EQS1,2,3	Solve problems, make diagrams and complete essay questions relating electric charge and Coulomb's law to materials and shapes.
8. Use Faraday's and Lenz's laws to find the electromotive forces.	CT EQ	Solve homework and test problems involving Faraday and Lenz's Laws.
9. Describe the components of a wave and relate those components to mechanical vibrations, sound, and decibel level.	A,C	Solve homework or test problems involving various types of waves, including sound.
10. Articulate the principles of reflection, refraction, diffraction, interference and superposition of waves.	CT EQ	Solve homework, lab or test problems involving the wave principles of reflection, refraction, diffraction and superposition.
11. Solve real-world problems involving optics, lenses, and mirrors.	CT CM EQ	Solve problems and make diagrams on homework, labs or tests involving optical devices such as lenses and mirrors.

LAB		
12. Prepare laboratory reports that clearly communicate experimental information in a logical and scientific manner.	CM2,5	Each student will complete laboratory handouts, including data tables, and report results in written laboratory reports. Reports will be evaluated on several criteria to include proper format and accuracy of results.
13. Conduct basic laboratory experiments involving electricity and magnetism.	CM3 TW1,3	Students will perform lab experiments in groups of 2 to 4 students. Participation of each student in the data collection will be required. Student will be required to analyze data and relate results to theory discussed in lecture.
14. Relate physical observations and measurements involving electricity and magnetism to theoretical principles.	CM	Students will answer questions on laboratory reports relating experimental results to the theory discussed in lecture.
15. Evaluate the accuracy of physical measurements and the potential sources of error in the measurements.	CM EQ	Students will calculate percent error and percent difference for experimental data and answer discussion questions detailing possible sources of error.
16. Design fundamental experiments involving principles of electricity and magnetism.	CT CM EQ TW	Students will work in groups to prepare a written report analyzing the data given and answering questions given. The questions will cover solve problems, apply principles to a new situation, make corrections and generate alternative solutions. Papers will be graded for mechanics, structure, content, logic and accuracy. Teamwork will be evaluated on for participation, synthesis of work and sharing work.
17. Identify appropriate sources of information for conducting laboratory experiments involving electricity and magnetism.	CM3	Students will relate textbook information to the results of experiments on electricity and magnetism by submitting written laboratory reports.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:**METHODS OF INSTRUCTION:**

Several teaching methods will be used in this course including:

1. There will be three hours per week used for lectures and demonstrations. These will parallel the presentation of material in the textbook. Lectures will include mathematical descriptions of theories and solution of example problems. Demonstrations will illustrate physical principles as appropriate.
2. Homework reading assignments and problem assignments will be given from the textbook on a daily basis and student questions over this material will be discussed in lecture.
3. There will be a three hour weekly laboratory session. The students will work in small groups to perform demonstration experiments which will illustrate or will write a laboratory report concerning each experiment.
4. There will be regular tests given in lecture (approximately 3 to 5 per semester) to reinforce the student's comprehension of the material discussed in the lecture session.

METHODS OF EVALUATION:

1. There will be regular homework assignments which will be collected and graded.
2. There will be a laboratory report written for each experiment performed.
3. There will be at least one test given over each major area of study: physics and chemistry.
4. There will be a comprehensive final exam.

The final grade will be computed on the following basis:

Major tests: approximately 50%

Laboratory Reports: approximately 25%

Homework and Final Exam: approximately 25%

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Jim Guillory	Signature Jim Guillory	Date Fall 2013
Division Chair Nancy Long	Signature Nancy Long	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: Learning Frameworks

Prefix and Number: PSYC 1300

Division – Department: Social Sciences - Psychology

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

A study of the 1) research and theory in the psychology of learning, cognition, and motivation, 2) factors that impact learning, and 3) application of learning strategies. Theoretical models of strategic learning, cognition, and motivation serve as the conceptual basis for the introduction of college-level student academic strategies. Students use assessment instruments (e.g., learning inventories) to help them identify their own strengths and weaknesses as strategic learners. Students are ultimately expected to integrate and apply the learning skills discussed across their own academic programs and become effective and efficient learners. Students developing these skills should be able to continually draw from the theoretical models they have learned.

Prerequisites/Co-requisites:

None

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Develop a personal code of ethics	CT CM SR	Discussions and writing assignments or class presentation that provides in-depth analysis of one theory of learning. Writings and/or presentation will be evaluated for depth of analysis as well as grammatical and syntax accuracy.
2. Manage time more efficiently	SR EQS?	Discussions and writing assignments or class presentation that provides in-depth analysis of one theory of cognition. Writings and/or presentation will be evaluated for depth of analysis as well as grammatical and syntax accuracy.
3. Improve ability to recall information	CT CM	Discussions and writing assignments or class presentation that provides in-depth analysis of one theory of motivation. Writings and/or presentation will be evaluated for depth of analysis as well as grammatical and syntax accuracy.
4. Read a textbook with improved retention; prepare	CM SR	Select various assessment instruments to measure individual

for and take tests; take effective notes; use technology in the college setting		student learning style and provide statistical analysis of common strengths and weaknesses. Conduct assessment on three outside individuals, providing them with strategies for improving upon weaknesses and enhancing strengths.
5. Set goals through the process of self-discovery	CT CM	
6. Engage in personal assessment activities; collect information used for a personal student learning profile	EQS	
7. Report in writing and verbally on college career and research	CM	
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: The course grade will be determined by a combination of assignments, tests, and projects.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Wendy Mays	Signature Wendy Mays	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



**TRINITY VALLEY COMMUNITY COLLEGE
ADMINISTRATIVE-MASTER SYLLABUS**

The Administrative- Master Syllabus is an administrative tool; it is **not intended to be distributed to students.** It is the intention of this Administrative-Master Syllabus to provide a general description of the course, outline the required elements of the course and to lay the foundation for course assessment for the improvement of student learning, as specified by the faculty of TVCC, regardless of who teaches the course, the timeframe by which it is instructed, or the instructional method by which the course is delivered. It is not intended to restrict the manner by which an individual faculty member teaches the course but to be an administrative tool to aid in the improvement of instruction. The Administrative-Master Syllabus will demonstrate that there is consistency and comparability in course offerings.

Course Title

General Psychology

Course Prefix and Number

PSYC 2301

Department – Division

Social Science

Course Type – select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☐ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture Hours: Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description

A survey of the major psychological topics, theories and approaches to the scientific study of behavior and mental processes.

Prerequisites/co requisites

TSI complete in Reading

Topical Outline

Mandatory Topics Include:

THE SCIENCE OF PSYCHOLOGY – History, Scope and Research Strategies

THE BIOLOGY OF BEHAVIOR - Neural and Hormonal Systems and the Brain

LEARNING - Basic Learning Concepts and Classical Conditioning; Operant Conditioning; Biology, Cognition, and Learning

Instructor Selected Topics Include:

THE BIOLOGY OF BEHAVIOR - Genetics, Evolutionary Psychology and Behavior

CONSCIOUSNESS

LIFESPAN DEVELOPMENT

GENDER AND SEXUALITY

SENSATION AND PERCEPTION

MEMORY

THINKING, LANGUAGE, AND INTELLIGENCE

MOTIVATION AND EMOTION

STRESS AND HEALTH

PERSONALITY

SOCIAL PSYCHOLOGY

PSYCHOLOGICAL DISORDERS

THERAPY

Mark with an "X"	Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Course Learning Objectives	Core Objective(s) Met	Suggested Learning Activities
1. Identify research methods and their characteristics used in the scientific study of psychology.	EQ	Activities may include: As determined by a standardized departmental measure, students will be able to distinguish between descriptive, correlational and experimental methods of research including a demonstration of the understanding of the steps involved in experimental design; the manipulation of independent and dependent variables to determine cause and effect; the process of random sampling to minimize pre-existing differences between groups, the <u>analysis of results to confirm or deny a given hypothesis</u> and the determination of positive and negative correlations.
2. Describe the historical influences and early schools of thought that shaped the field of psychology.	CT CM	Activities may include: Using an essay format, , students will <u>present an argument justifying similarities and differences between structuralism and functionalism</u> and <u>suggest connections between these early</u>

		<u>schools of thought and more contemporary psychological perspectives.</u>
3. Describe the prominent perspectives and approaches used in the study of psychology.	CT CM SR	Activities may include: A “Ripped from the Headlines” scenario (examples include Sandy Hook and Virginia Tech) will require students to generate alternative explanations for determining the possible causation of behavior and mental processes. Relating knowledge gained in the classroom, students will apply the biopsychosocial approach, developing a written narrative establishing <u>connections between biological, psychological and social-cultural influences as typified in the 7 major theoretical perspectives. Students will evaluate the local community in terms of possible factors contributing to the development of psychological disorders, resources available and methods for improving said resources.</u>
4. Demonstrate an understanding of the terminology unique to the study of psychology.	CT	Activities may include: The student will demonstrate effective usage of terminology unique to the field of psychology and be able to <u>establish connections between terms associated with the physical, cognitive and psychological aspects of the field.</u> Formal essays, group discussions and objective and subjective measures will be used to determine competency.
5. Describe accepted approaches and standards in psychological assessment and evaluation.	CT CM	Activities may include: Through written format, students will <u>make connections between the medical model and the biopsychosocial approach as methods of psychological assessment and present arguments justifying similarities and differences between the two approaches.</u> Using an oral or written format the student will assess the need for and the accuracy of the

		classification of disorders as determined by the DSM V method. Students will adopt a “pro/con” stance regarding the use of psychological labels and <u>support the logic of said stance, weighing the benefits/negative consequences</u> associated with labeling.
6. Identify factors in physiological and psychological processes involved in human behavior.	CT	Activities may include: As determined by a standardized departmental measure, students will be required to identify the contributions of physiological and psychological processes involved in behavior.

Required Text(s)

Contact the TVCC bookstore for required textbook and materials for this course

Dual Credit embedded instructors

Contact the TVCC Director of Dual Credit for detailed information on the required textbooks and materials to be used in this course.

Material/Technology to be supplied by the student

The student should have access to the required text. Access to a reliable computer with internet connection is recommended.

Course/Grading Requirements

Mandatory Topics include the history, scope and major perspectives of psychology; scientific methodology/research strategies; neural and hormonal systems; the brain; basic learning concepts, classical conditioning, operant conditioning and observational learning.

Mastery of core objectives is linked to the major perspectives and scientific methodology/research strategies.

All faculty must participate in departmental assessments to meet state and institutional requirements. Activities and reporting forms will be provided by the Departmental Coordinator. Results must be submitted to the Division Chairperson prior to the last date of the semester.

*A minimum of fifteen (15) modules must be addressed during the semester.

*A minimum of 60% of the grade must be derived from structured exams/quizzes.

*A final comprehensive exam is strongly recommended.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by	Signature	Date
Department Head	Signature	Date
Division Chair	Signature	Date
Vice President	Signature	Date



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Lifespan Growth & Development

Prefix and Number: PSYC 2314

Division – Department: Social Sciences - Psychology

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Life-Span Growth and Development is a study of social, emotional, cognitive and physical factors and influences of a developing human from conception to death.

Prerequisites/Co-requisites:

TSI Complete in Reading

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Describe the stages of the developing person at different periods of the lifespan from birth to death.	CT CM	Students will be provided a handout noting the 8 age groups in lifespan. For each age group, the student will consider a person representative of each age group and identify 3 words or phrases that describe that person. Using an oral or written presentation, students will identify commonalities and connections across the lifespan, as well as differences between the life stages.
2. Discuss the social, political, economic, and cultural forces that affect the development process of the individual	CT CM	Using an essay format and utilizing the model from Urie Bronfenbrenner's contextual theory, students will connect the various influences impacting their personal development in the microsystem, mesosystem, exosystem, macrosystem and chronosystem. Students will identify the interconnectedness and multidirectional nature of influences as well as broad cultural factors.

3. Identify factors of responsible personal behavior with regard to issues such as sexual activity, substance abuse, marriage and parenting.	SR	<p>Students will select three couples in young adulthood (ages 20-40) and ask a series of questions concerning dating, marriage and parenthood.</p> <p>Using a formal essay or oral presentation, the student will connect findings to the work of Judith Wallerstein who has identified 9 psychological tasks all couples need to address in order to have a successful marriage.</p> <p>OR</p> <p>Using a formal essay or oral presentation students will focus on an issue related to responsible personal behavior and contribute their opinions and/or personal concerns regarding such behavior within the local community and the national community. Students will utilize knowledge and principles acquired in the classroom to propose possible solutions to the problematic behavior.</p>
4. Explain the biosocial, cognitive and psychological influences throughout the lifespan as an ongoing set of processes, involving both continuity and change.	CT CM	Using a formal essay or oral presentation, the student will connect the various influences throughout the lifespan.
5. Describe the different developmental perspectives of the major theories of development (i.e. cognitive, learning, humanistic and psychodynamic).	CT	<p>As determined by a standardized departmental measure, students will be able to identify the characteristics of the 6 major perspectives of lifespan development.</p> <p>In a written format, students will compare and contrast theories within a perspective.</p> <p>Selecting a theory deemed most plausible, students will present arguments justifying their preference.</p>
6. Identify examples of some of the cultural and ethnic differences that influence development throughout the lifespan.	CT	Through written response, the student will identify differences between individualistic and collectivistic cultures in the process of mate selection, career development, religion and political

		organization. In identifying a “preferred” culture, students will present arguments to justify the choice.
7. Discuss the various causes or reasons for disturbances in the developmental process.	CT CM	The student will prepare a Life Review through an interview process with a person aged 65 years or older. The subject’s life experiences will be documented in narrative form. The student will relate/connect the findings to Erikson’s Psychosocial Theory of development and present arguments supporting a positive or negative outcome of each crisis, noting those circumstances which determined the outcome.
8. Identify various research methods and their characteristics used in the scientific field of psychology.	EQ	As determined by a standardized departmental measure, students will be able to distinguish between descriptive, correlational and experimental methods of research including a demonstration of the understanding of <u>the steps involved in experimental design</u> ; the manipulation of independent and dependent variables to determine cause and effect; the process of random sampling to minimize pre-existing differences between groups, the <u>analysis of results to confirm or deny a given hypothesis</u> and the determination of positive and negative correlations.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION:

Major Exams: Major exams shall be given throughout the course at the end of the various units of study. Additionally, the student shall be given a handout at the beginning to the semester which will identify to the student the units of study and the chapters of the text book from which each of the major exams will be taken. Well in advance of each exam, the instructor shall inform the students as to the type of exam *that will be given*; i.e., True/False, Multiple Choice, Matching, Short Answer, Essay, or any combination of the above. As near as possible, each chapter within each of the units shall be given equal weight on the exam.

Final, Exam: The final exam shall be comprehensive over everything covered during the semester. It *shall be in a* format that is consistent with other exams given during the semester.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Cindy Moseley	Signature Cindy Moseley	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Introduction to Sociology

Prefix and Number: SOCI 1301

Division – Department: Social Sciences - Sociology

Course Type: select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

The scientific study of human society, including ways in which groups, social institutions, and individuals affect each other. Causes of social stability and social change are explored through the application of various theoretical perspectives, key concepts, and related research methods of sociology. Analysis of social issues in their institutional context may include topics such as social stratification, gender, race/ethnicity, and deviance.

Prerequisites/Co-requisites:

None

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Compare and contrast the basic theoretical perspectives of sociology.	CT CM	Visual Power points will be shown taking a societal problem and have students choose a theoretical perspective from which to solve the problem and provide justification and produce an alternative as well. Students will take another situation and do the same as a group. They will then make a presentation to the class with a written report assessing the mechanics, evaluating structure, measuring the content, logic and accuracy of their ideas.
2. Identify the various methodological approaches to the collection and analysis of data in sociology.	CT CM EQ	Students will conduct research in the field by carrying out a set of behaviors, writing the results, analyzing the data and drawing conclusions based on a matrix covering certain points. A written report will be submitted for a grade based on proper grammar usage.
3. Describe key concepts in sociology.	CM SR	Students will be required to attend a civic function, school board meeting, community activity or a state or national meeting about needs. A written report using proper grammatical usage will be

		submitted as well as a list of sociological terms used during the meeting. Power points over various culture differences will be given to show real world differences.
4. Describe the empirical findings of various subfields of sociology.	CM EQ	Historical research on various topics will be conducted by students with a written or oral presentation emphasizing proper grammatical usage and proper research techniques.
5. Explain the complex links between individual experiences and broader institutional forces.	CM	Oral lecture and power point presentation over the sociological imagination using examples and discussion questions on the topic.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: The course grade will be determined by a combination of tests, essays, projects or *research papers*. *There will be at least 4 tests and could include optional* requirements by individual instructors

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brad Elmore	Signature Brad Elmore	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Social Problems

Prefix and Number: SOCI 1306

Division – Department: Social Sciences - Sociology

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Application of sociological principles and theoretical perspectives to major social problems in contemporary society such as inequality, crime and violence, substance abuse, environmental issues, deviance, or family problems.

Prerequisites/Co-requisites:

None

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Describe how the sociological imagination can be used to explain the emergence and implications of contemporary social problems.	CT CM	Oral lecture and power point presentation over the sociological imagination using examples and discussion questions on the topic. Students will be given a societal problem and will work in groups to find a workable solution.
2. Explain the nature of social problems from at least one sociological perspective, e.g., critical, functional, interpretive, etc.	CM	Visual power points will be shown taking a societal problem and have students choose a theoretical perspective from which to solve the problem and provide justification and produce an alternative as well. Students will take another situation and do the same as a group. They will then make a presentation to the class with a written report assessing the mechanics, evaluating structure, measuring the content, logic and accuracy of their work.
3. Identify multidimensional aspects of social problems including the global, political, economic, and cultural dimensions of social problems.	CT CM EQ SR	Students will be required to attend a civic function, school board meeting, community activity or a state or national meeting about needs. A written report using proper grammatical usage will be submitted as well as a list of sociological terms used during the meeting. Power points over various culture differences will be given to show real

		world differences. Historical analysis of a problem using proper research techniques will also be discussed in class.
4. Discuss how solutions to social problems are often contentious due to diverse values in society.	CT CM EQ SR	Attend a civic, school, community, state or national meeting or a court case involving topics which has diverse opinions and attitudes among the participants. Historical research on a past problem could be done individually or in groups using proper research techniques and then have oral discussions to present the evidence found.
5. Describe how the proposed solutions to a social problem, including social policies, may bring rise to other social problems.	CT CM SR	Attend a civic, school, community, state or national meeting or a court case involving topics which has diverse opinions and attitudes among the participants, and discuss what could occur as a result of the policies examined.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: The methods of instruction used in this course will be primarily lecture, film and demonstration. Class discussion will be encouraged in each class. If the opportunity presents itself, guest lectures will be invited when available.

METHODS OF EVALUATION: The course grade will be determined by a combination of tests, essays, projects or *research papers*. *There will be at least 4 tests and could include optional requirements by individual instructors.*

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brad Elmore	Signature Brad Elmore	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



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Course Title: Marriage and the Family

Prefix and Number: SOCI 2301

Division – Department: Social Sciences - Sociology

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Sociological and theoretical analysis of the structures and functions of the family, the varied cultural patterns of the American family, and the relationships that exist among the individuals within the family, as well as the relationships that exist between the family and other institutions in society.

Prerequisites/Co-requisites:

None

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
X	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
X	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate understanding of the family and marriage as social institutions through theoretical perspectives.	CT CM SR	Visual Power points will be shown taking a societal problem and have students choose a theoretical perspective from which to solve the problem and provide justification and produce an alternative as well. Students will take another situation and do the same as a group. They will then make a presentation to the class with a written report assessing the mechanics, evaluating structure, measuring the content, logic and accuracy of their ideas. A marriage or family counselor will be invited to speak on various techniques from a theoretical approach.
2. Examine the diversity and complexity of contemporary families.	CT CM	Oral lecture and power point presentation over the diversity and complexity of families. Types of families will be defined and assignments given for students to make a written presentation on various types of families emphasizing on proper grammatical usage.

3. Explore changing cultural attitudes about marriage and alternatives to marriage.	CT CM SR	Oral lecture and power point presentation over the attitudes and alternatives to marriage. A written presentation will be assigned that explores the alternatives to marriage and the attitudes about each alternative with an emphasis on grammatical usage.
4. Critically evaluate such issues as sexuality, partner choice, resolving marital issues, having and raising children, and combining work with family.	CT CM EQ	The internet will be used in an individual written assignment to research the areas of sexuality, partner choice, resolving marital issues, children and work using proper research techniques and grammatical usage.
5. Demonstrate understanding of the relationship between theories and research methods used in the scientific study of marriage and family.	EQ	Students will pick one of 3 major theoretical perspectives and research a topic or problem dealing with marriage and family. A written or oral presentation will be made discussing the problem, solution and alternatives using proper grammatical usage.
6. Describe some of the historical changes and current trends regarding the structural nature of the American family including the role of gender in relationships.	CM EQ SR	Historical research on the topics of gender roles in relationships and the current trends in the American family will be conducted by students with a written or oral presentation emphasizing proper grammatical usage and proper research techniques.
7. Identify causes and consequences of relevant problems within contemporary families.	CT CM	Group discussions will be conducted by assigning relevant topics, and having students discuss the causes, consequences and theories of that topic. The group will present their ideas and the rest of the class will add their ideas in an open format.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF INSTRUCTION: The methods of instruction used in this course will be primarily lecture, film and demonstration. Class discussion will be encouraged in each class. If the opportunity presents itself, guest lectures will be invited when available.

METHODS OF EVALUATION: The course grade will be determined by a combination of tests, essays, projects or *research papers*. *There will be at least 4 tests and could include optional* requirements by individual instructors.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Brad Elmore	Signature Brad Elmore	Date Fall 2013
Division Chair Brad Elmore	Signature Brad Elmore	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Beginning Spanish I

Prefix and Number: SPAN 1411

Division – Department: Language Arts - Spanish

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	4	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students will acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the beginner level.

Prerequisites/Co-requisites:

None

Topical Outline:

Section One

- Interrogative words
- The Spanish alphabet
- Greetings and farewells
- Subject pronouns
- Ser and tener
- Exchanging personal information

Section Two

- Present Tense of regular -ar verbs
- Me gusta + infinitives
- Telling time and the days of the week
- Infinitive Phrases

Section Three

- Common uses of ser
- Present tense of -er and -ir verbs
- Agreement with descriptive adjectives
- Tener idioms

Section Four

- Gustar and nouns
- Ir a + destination or infinitive
- The months of the year
- Irregular yo forms
- Saber, conocer and the personal a
- Weather expressions
- Introduction of the preterit tense

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Engage in conversations using level-appropriate grammatical structures including narrating events that take place in the present and producing questions and responses on a variety of topics dealing with everyday life.	CT CM PR	Students will listen to stories from instructor then be asked to answer questions in the target language. In lab students will be asked to write in Spanish a 100 word recount of the story told in class.
2. Demonstrate understanding of level-appropriate spoken Spanish.	CT CM SR PR	Students will answer questions produced in written and oral formats. Students will give a 3 minute oral presentation to the class. They will use visuals such as PowerPoint, pictures, etc. Students will be grade on professional dress, fluency, presentation of topic.
3. Write simple sentences and organize them into paragraphs.	CT CM PR	Students will write a 350 word essay that will be grade for grammar, vocabulary and creativity.
4. Read and comprehend level-appropriate texts.	CT CM PR	Students will read and respond to short readings from textbook, on-line text, letters and news media.
5. Identify and discuss traditions, customs and values of the Hispanic world, and compare and contrast them with characteristics of their own culture.	CT CM SR PR	Student groups will be assigned to particular nations in the Spanish language world, and they will discuss foods, traditions, and differences in cultures. Students will learn a song by a famous singer from each of the 5 countries studied in this course.
6. Compare and contrast the traditions, customs and values of the Hispanic world with characteristics of their own culture.	SR	Student will respond in prose to the various cultural traditions, customs and values of the Hispanic World. Each chapter in our text will highlight a new geographic region.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: Four exams that are worth 100 points each.

Undetermined number of reading/speaking quizzes worth 100 points each

Course Grades: 90-100 points = A
 80-89 points = B
 70-79 points = C
 60-69 points = D
 Less than 60 points = F

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Bill Monds	Signature Bill Monds	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Beginning Spanish II

Prefix and Number: SPAN 1412

Division – Department: Language Arts - Spanish

Course Type: Select from one of the following categories.

- ☐ - **Academic General Education Course** (from ACGM – but not in TVCC Core)
- ☒ - **Academic TVCC Core Course**
- ☐ - **WECM Courses**

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
4	4	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Continued development of basic Spanish language skills in listening, speaking, reading, and writing within a cultural framework. Students acquire the vocabulary and grammatical structures necessary to communicate and comprehend at the high beginner to low intermediate level

Prerequisites/Co-requisites:

Prerequisite: SPAN 1411 Beginning Spanish I or equivalent

Topical Outline:

Section One

Present tense of stem-changing verbs
Tener idioms
Affirmative tú mandatos
Estar and the present progressive

Section Two

Reflexive verbs and pronouns
Acabar de and infinitives
Ser vs. estar
Demonstrative adjectives and pronouns

Section Three

Comparatives and superlatives
Verbs regular in the preterite
Verbs with stem and spelling changes in the preterite

Section Four

Stressed possessives
Verbs irregular in the preterite
Direct object pronouns
Imperfect tense

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Engage in conversations using level-appropriate grammatical structures including narrating events that take place in the past.	CT CM	Students will form into groups of three. They will be assigned a particular notion which occurred in the past, and they will converse in Spanish, employing the preterite and imperfect.
2. Demonstrate understanding of level-appropriate spoken Spanish produced by Spanish speakers of diverse origins.	CT CM	Students will listen to various newscasts from the previous week and will answer questions based upon the content.
3. Write simple to moderately complex sentences using level-appropriate grammatical structures and organize them into cohesive paragraphs.	CT CM PR	Students will produce written communications for use in business and social settings.
4. Read and comprehend level-appropriate authentic texts.	CT CM	Students will read excerpts from short level appropriate texts and respond in either oral or written answers. The format of responses will be determined by the professor.
5. Identify and discuss traditions, customs and values of the Hispanic world.	CT CM SR PR	The students will study various religious and secular customs and holidays celebrated in Spanish language countries and field answers in a panel setting.
6. Compare and contrast the traditions, customs and values of the Hispanic word with characteristics of their own culture.	CT CM	Students will prepare written or oral portfolio or presentation comparing the traditions, customs, and values in relation to their respective culture.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF EVALUATION: Four exams that are worth 100 points each.

Undetermined number of reading/speaking quizzes worth 100 points each

Course Grades: 90-100 points = A
 80-89 points = B
 70-79 points = C
 60-69 points = D
 Less than 60 points = F

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
--

Prepared by Bill Monds	Signature Bill Monds	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Intermediate Spanish I

Prefix and Number: SPAN 2311

Division – Department: Language Arts - Spanish

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world.

Prerequisites/Co-requisites:

Prerequisite: SPAN 1412 Beginning Spanish II or equivalent

Topical Outline:**Section One**

Stressed possessives

Irregular preterit

Direct object pronouns

Imperfect tense

Section Two

Preterit vs. imperfect

Affirmative and negative expressions

Hace and hace que

Section Three

Indirect object pronouns

Double object pronouns

Prepositions and adverbs of location

Formal and negative tú commands

Section Four Presentperfect Reciprocal
constructions

Adverbs of time and sequencing of events

Por and para

Subjunctive mood with impersonal and statements of volition

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate comprehension of authentic spoken discourse produced by Spanish speakers of diverse origins.	CT CM	Students will listen to assigned oral activities and respond in recorded spoken language.
2. Produce oral Spanish comprehensible to native speakers using complex grammatical structures to narrate, describe, and elicit information.	CT CM SR PR	Students will engage in community interviews with native speakers and report to class employing a variety of media.
3. Demonstrate increasing comprehension of authentic written texts in a variety of genres.	CT CM	Student essays will be assigned to critique short stories or other Spanish sources.
4. Write descriptions and narratives at a low intermediate level using complex grammatical structures.	CT CM PR	Students will produce narratives of the daily current events.
5. Describe cultural practices and products of the Spanish speaking world drawing on authentic materials including literature and the visual arts.	CT CM SR	Using the Encuentro Cultural sections of the text, students will produce classroom presentations including authors and artists from target countries and regions.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:
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METHODS OF INSTRUCTION:

METHODS OF EVALUATION: Four exams that are worth 100 points each.

Two Critical Reviews worth 100 points each

Undetermined number of reading/speaking quizzes worth 100 points each.

Course Grades: 90-100 points = A

80-89 points = B

70-79 points = C

60-69 points = D

Less than 60 points = F

<i>Approvals – the contents of this document have been reviewed and are found to be accurate.</i>
--

Prepared by Bill Monds	Signature Bill Monds	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Intermediate Spanish II

Prefix and Number: SPAN 2312

Division – Department: Language Arts - Spanish

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

The consolidation of skills acquired at the introductory level. Further development of proficiency in listening, speaking, reading and writing. Emphasis on comprehension, appreciation, and interpretation of the cultures of the Spanish-speaking world.

Prerequisites/Co-requisites:

Prerequisite: SPAN 2311 Intermediate Spanish I or equivalent

Topical Outline:

Section One

Subjunctive following verbs of emotion and ojalá
Subjunctive to state uncertain, doubtful or hypothetical situations
Study of the unique cultures of Spanish language countries

Section Two

Subjunctive with purpose and time clauses Se for unplanned occurrences (No-fault se)
Past participle as an adjective

Section Three

The future tense
The conditional
Present perfect subjunctive

Section Four

Past (imperfect) subjunctive
If clauses

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Su
1. Summarize authentic spoken discourse produced by Spanish speakers of diverse origins.	CT CM SR PR	Each stu one coun each cul Cultural student informa informa professo student question will lead all neces key idea historica and pers
2. Produce Spanish comprehensible to native speakers using complex grammatical structures to communicate analytical and interpretive information in both impromptu and prepared speech.	CT CM	Students projects various s and curr students the end the class
3. Demonstrate increasing comprehension of authentic written texts in a variety of genres.	CT CM SR PR	Each stu read all be respo reading of one as student collabor presenta features authors' overview the assign Google I accessed study gu
4. Write evaluations and critiques at a high intermediate level using complex grammatical structures.	CT CM	The stud read sele stories b will proo
5. Interpret cultural practices and products of the Spanish speaking world drawing on authentic materials including literature and the visual arts.	CT CM SR PR	Students art, writ practices speaking

Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: Four exams worth 100 points each.

Two Critical Reviews worth 100 points each

Undetermined number of reading quizzes worth 100 points each.

Course Grades: 90-100 points = A
 80-89 points = B
 70-79 points = C
 60-69 points = D
 Less than 60 points = F

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Bill Monds	Signature Bill Monds	Date Fall 2013
Division Chair Bill Monds	Signature Bill Monds	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Public Speaking

Prefix and Number: SPCH 1315

Division – Department: Speech & Fine Arts - Speech

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Application of communication theory and practice to the public speaking context, with emphasis on audience analysis, speaker delivery, ethics of communication, cultural diversity, and speech organizational techniques to develop students' speaking abilities, as well as ability to effectively evaluate oral presentations.

Prerequisites/Co-requisites:

None

Topical Outline:

Public Speaking Perspectives

Analyzing an Audience

Determining General and Specific Purposes and Creating a Thesis Researching and Organizing Supporting Material/Citing Sources

Developing Visual Aids

Practicing/Verbal and Nonverbal Aspects of Presentation

Woven throughout these steps is

– Speaking for

Entertainment

Informative Speaking

Persuasive Speaking

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate an understanding of the foundational models of communication.	TW CM	-Students participate in the demonstration of the communication process through use of manipulatives. -Students explain the demonstration process to their assigned groups and are evaluated for their accuracy.

2. Apply elements of audience analysis.	CT	<p>-Students will produce a formal survey to obtain audience information/demographics for their speeches.</p> <p>-Student will apply the principles of audience analysis to analyze the appropriateness or effectiveness of a topic, resource material or audiovisual selections.</p>
3. Demonstrate ethical speaking and listening skills by analyzing presentations for evidence and logic	CM	<p>- Students will utilize a rubric to evaluate the structure, logic, appropriateness, and effectiveness of the verbal and nonverbal elements of a presentation, either a classmate's or a recorded speech</p>
4. Research, develop and deliver extemporaneous speeches with effective verbal and nonverbal techniques	CT CM TW	<p>-Students will produce informative, persuasive and entertainment or special occasion speeches for oral presentation and will be evaluated by the instructor and group members for mechanics, structure, connection of content with main topic, logic and accuracy and depth of content..</p> <p>-Students will apply the principles of research by completing a guided Speech Workshop to search for and evaluate sources.</p>
5. Demonstrate effective usage of technology when researching and/or presenting speeches.	CT CM PR CT	<p>-Students will apply the principles of research by completing a guided Speech Workshop using the databases and web search to search for and evaluate sources.</p> <p>-Students will produce a PowerPoint to use during their speech presentations connecting the content of the PowerPoint with the main topic of the presentation.</p> <p>-Students will explore a topic of interest for their speeches and seek a rich awareness of the subject while researching little known information about the subject.</p> <p>- Students will apply principles of research by conducting a "research scavenger hunt" on a selected persuasive topic. The "hunt" will allow the student to specify a research goal, generate</p>

		alternatives, consider risks, and/or choose better sources, as they find, test and use different resources as to the validity of the source.
6. Identify how culture, ethnicity and gender influence communication.	CT PR	-Students will apply the principles of audience analysis by creating and administering a survey to the class or larger audience to help the student/speaker better understand the diversity of the audience. The student will use the survey to adapt his speech (specifying goal, generating alternatives, etc) to the culture, ethnicity and gender groups in the audience, thus allowing the student to connect classroom with life experiences. (i.e. Identifying audience demographics in order to adapt a speech to that audience.)
7. Develop proficiency in presenting a variety of speeches as an individual or group (e.g. narrative, informative, or persuasive).	TW CM CT CM CT TW PR CM CM PR	-Groups select a topic and produce a specific purpose, central idea and formulate three main ideas. The groups orally present their developed topic to the class. The presentation is evaluated by the class for its connection of content with the main topic, logic and accuracy. - Students will produce informative, persuasive and entertainment or special occasion speeches for oral presentation and will be evaluated by the instructor and group members for mechanics, structure, connection of content with main topic, logic and accuracy and depth of content. -Students will complete written self-evaluations after each speech evaluating themselves as a learner and create a personal plan of action to improve their next speech. -Students will create a folder/journal to document their performances and/or self-reflection on their performances and create a personal plan of action to improve their next speech.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: The course grade is determined by a combination of assignments, tests, and speeches with speeches carrying the greatest weight.

Approvals – the contents of this document have been reviewed and are found to be accurate.

Prepared by Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013



TRINITY VALLEY COMMUNITY COLLEGE ADMINISTRATIVE-MASTER SYLLABUS

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Course Title: Business & Professional Communication

Prefix and Number: SPCH 1321

Division – Department: Speech & Fine Arts - Speech

Course Type: Select from one of the following categories.

- ☐ - Academic General Education Course (from ACGM – but not in TVCC Core)
- ☒ - Academic TVCC Core Course
- ☐ - WECM Courses

Semester Credit Hours: Lecture & Lab/other hours

Semester Credit Hours	Lecture Hours	Lab/Other* Hours
3	3	0

Other hours include practicum, clinical or other types of non-lecture instruction. *If other, please specify: _____

Course Catalog Description:

Study and application of communication within the business and professional context. Special emphasis will be given to communication competencies in presentations, dyads, teams and technologically mediated formats.

Prerequisites/Co-requisites:

None

Topical Outline:

Perspectives on Communicating at Work

Verbal Communication

Nonverbal

Communication Conflict

Resolution Interviewing

Group Communication/Leadership

Public Speaking -

Analyzing an Audience

Determining General and Specific Purposes and Creating a Thesis

Researching and Organizing Supporting Material/Citing Sources

Developing Visual Aids

Practicing/Verbal and Nonverbal Aspects of Presentation

Woven throughout these steps is

– Speaking for

Entertainment

Informative Speaking

Persuasive Speaking

Mark with an "X"	Required Core Objectives
X	A. Critical Thinking Skills (CT) – to include creative thinking, innovation, inquiry, and analysis, evaluation and synthesis of information
X	B. Communication Skills (CM) – to include effective development, interpretation and expression of ideas through written, oral and visual communication
	C. Empirical and Quantitative Skills (EQ) – to include the manipulation and analysis of numerical data or observable facts resulting in informed conclusions
X	D. Teamwork (TW) – to include the ability to consider different points of view and to work effectively with others to support a shared purpose or goal
	E. Social Responsibility (SR) – to include intercultural competence, knowledge of civic responsibility, and the ability to engage effectively in regional, national, and global communities
X	F. Personal Responsibility (PR) – to include the ability to connect choices, actions, and consequences to ethical decision-making

Student Learning Outcomes	Core Objective(s) Addressed	Suggested Learning Activities
1. Demonstrate communication competence and critical thinking through an understanding of the foundational communication models.	<p>TW</p> <p>CM</p> <p>CT 1, 3 PR</p>	<p>-Students participate in the demonstration of the communication process through use of manipulatives.</p> <p>-Students explain the communication process to their assigned groups and are evaluated for their accuracy.</p> <p>- Students will produce a self-reflective portfolio examining their own communication habits for one week to determine if their communication in different contexts was appropriate and effective by applying the principles of effective communication to connect the course material to life experiences.</p>
2. Demonstrate essential public speaking skills in professional presentations.	<p>TW CM CT</p> <p>CM CT TW PR</p> <p>CM</p> <p>CM PR</p>	<p>-Groups select a topic and produce a specific purpose, central idea and formulate three main ideas. The groups orally present their developed topic to the class. The presentation is evaluated by the class for its connection of content with the main topic, logic and accuracy.</p> <p>- Students will produce informative, persuasive, and group speeches for oral presentation and will be evaluated by the instructor and group members for mechanics, structure, connection of content with main topic, logic and accuracy and depth of content.</p> <p>-Students will complete written self-evaluations after each speech evaluating themselves as a learner and create a personal plan of action to improve their next speech.</p> <p>-Students will create a folder/journal to document their performances and/or self-reflection on their performances and create a personal plan of action to improve their next speech.</p>

<p>3. Demonstrate written and oral competencies as it relates to employment (including job searches, interviews, interpersonal interaction, conflict management, leadership and performance appraisals.)</p>	<p>CT PR</p>	<p>- Students will create a portfolio to show the exploration of their own communication style and how they communicate with others on a daily basis, by filling out the WTC measure; their communication apprehensions as measured by the Personal Report of Communication Apprehension (PRCA-24); their measure of argumentativeness (ARG). All instruments are located in textbook.</p>
	CT PR	<p>- Using the portfolio, students will create a personal plan of action to specify a goal and generate alternatives to improving their own communication style in interviews, interpersonal, conflict management and presentations.</p>
	CM PR CM	<p>- Students will complete a written or oral presentation based on an information seeking interview with someone in their desired career or of a different cultural background that will help them identify the connection between the course material and life experiences and will be evaluated by the instructor and group members for mechanics, structure, connection of content with main topic, logic and accuracy and depth of content.</p>
	CM PR5 TW	<p>- Students will complete a written presentation of the research found about their desired career field so that they can make connections between the course material and life experiences. Activity can be completed by students working in groups with students in other similar career paths.</p>
	CM PR CM	<p>- Students will complete a persuasive oral presentation based their research of their desired career field, identifying how their own skills qualify them for an entry level position in the field. The presentation will be evaluated by the instructor and group members for mechanics, structure, connection of content with main</p>

		topic, logic and accuracy and depth of content.
4. Apply essential dyadic and small group processes as they relate to the workplace.	<p>TW</p> <p>TW CM</p>	<p>-Students will work in groups to interpreting verbal and nonverbal messages for accuracy, clarity and appropriateness and applying contexts such as culture, gender, status, etc.</p> <p>- Students will complete an oral presentation with a group to identify and expound on communication theories to improve interpersonal and small group processes in the work place. The presentation will be evaluated by team members, other students and the instructor on the basis of mechanics, structure, connection of content with the main topic, logic, accuracy and depth of content.</p>
5. Utilize various technologies as they relate to competent communication.	<p>TW CT2</p> <p>CT CT</p>	<p>-Students will work with a group to provide justification for selecting of the appropriate channel for different types of messages.</p> <p>- Students will apply principles of research by conducting a “research scavenger hunt” on a selected persuasive topic. The “hunt” will allow the student to specify a research goal, generate alternatives, consider risks, and/or choose better sources, as they find, test and use different resources as to the validity of the source.</p>
6. Demonstrate effective cross-cultural communication.	CT PR	<p>-Students will apply the principles of audience analysis by creating and administering a survey to the class or larger audiences to help the student/speaker better understand the diversity of the audience. The student will use the survey to adapt his speech (specifying goal, generating alternatives, etc) to the culture, ethnicity and gender groups in the audience, thus allowing the student to connect classroom with life experiences. (i.e. Identifying audience demographics in order to adapt a speech to that audience.)</p> <p>- Students will complete an oral</p>

	TW CM	presentation with a group to demonstrate effective intercultural communication theories. The presentation will be evaluated by team members, other students and the instructor on the basis of mechanics, structure, connection of content with the main topic, logic, accuracy and depth of content.
Before the semester begins, contact your division chair for specific details concerning the assessment plan created to measure the core objectives of this course.		

Required Text(s):

Please visit the [TVCC bookstore online](#)

Optional Text(s):

Please visit the [TVCC bookstore online](#)

Material/Technology to be supplied by the student:

Please visit the [TVCC bookstore online](#)

Dual Credit embedded instructors:

Contact the TVCC director of dual credit for detailed information.

Course Requirements/Grading System:

METHODS OF EVALUATION: The course grade is determined by a combination of assignments, tests, and speeches.

Approvals – the contents of this document have been reviewed and are found to be accurate.

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Division Chair Kelly Driskell	Signature Kelly Driskell	Date Fall 2013
Vice President Wendy Mays	Signature Wendy Mays	Date Fall 2013