|  | Office of<br>Research & Planning | *Prepared by*:<br>Keith Wurtz |
|---|---|---|

**Research Briefs from the Office of Research and Planning**
**Results from the Assessment of Course SLOs Map to Crafton's ILOs**

*Overview*:  The Crafton Hills College (CHC) Institutional Learning Outcomes (ILO) Committee developed a survey to assess how course student learning outcomes (SLO) map to Crafton's ILOs.  The survey was administered at a Fall 2011 Flex Day workshop to pilot the mapping of course SLOs with CHC's ILOs.  The purpose of this brief is to illustrate on a course level where the most emphasis occurs in assessing each ILO so that the committee can begin to explore assessing ILOs by aggregating assessments across courses.  As a result, the Outcomes Committee is going to use this information to aggregate assessments at the course level and conduct a pilot to begin to assess ILOs.  Accordingly, after reviewing the results presented in this brief the outcomes committee needs to identify and locate the assessment data for each course that is identified as one in which that will contribute to the assessment of a chosen ILO.  These assessment results will then be aggregated and evaluated by the Outcomes Assessment Committee.

*Summary of Findings*:
*Sample*
- The survey was completed by 10 programs, for 32 courses, and 81 learning outcomes.

*Findings*
- Critical thinking, written and oral communication, and information literacy were emphasized the most in the assessment of learning outcomes for the participants of the workshop

*Critical Thinking*
- 64% of the responses identified critical thinking as a major assessment emphasis
- Courses identified as having a major emphasis in assessing Critical Thinking
  - CDE-182
  - ENGL-152
  - ENGL-160
  - ENGL-170
  - ENGL-250
  - ENGL-260
  - MATH-952
  - PSYCH-102

*Written and Oral Communication*
- 59% identified written and oral communication as a major assessment emphasis
- Courses identified as having a major emphasis in assessing Written and Oral Communication
  - CHEM-102
  - CHEM-123
  - CHEM-213
  - ENGL-127
  - ENGL-160
  - ENGL-170
  - ENGL-250
  - ENGL-260
  - ENGL-261

*Information Literacy*
- 54% identified information literacy as a major assessment emphasis
- Courses identified as having a major emphasis in assessing Information Literacy
  - CHEM-213
  - ENGL-127
  - ENGL-152
  - ENGL-160
  - ENGL-170
  - ENGL-250
  - ENGL-260
  - ENGL-261
  - LIBR-100

*Methodology*: The survey was administered in both paper and online formats to the participants at a workshop on ILOs during the Fall 2011 Flex Day on September 14th, 2011. Respondents provided the course SLO and identified to what degree each ILO was emphasized by the course SLO on the following scale: no emphasis, some emphasis, and major emphasis.

In order to set-up the form to help streamline the responses, each ILO was separated into specific areas to help facilitate the process of completing the form. As an illustration, the Critical Thinking ILO is stated in the following way: Students demonstrate critical thinking through decision-making, problem-solving, analysis of information, and creative thinking across the disciplines. The survey asked respondents to rate how the stated course SLO emphasized each of the following aspects of critical thinking: decision-making, problem solving, analysis of information, and creating thinking across the disciplines (see Appendix A).

*Sample*: The survey was completed by 10 programs, for 32 courses, and 80 stated learning outcomes. Referring to Table 1 in Appendix B, in brief, the English department mapped their course SLOs for 21 outcomes and 7 courses and the Physical and Biological Sciences department mapped their course SLOs for 11 outcomes and 9 courses. Appendix C, Table 2 also includes each learning outcome by course. Some of the learning outcomes are abbreviated.

*Findings*: In order to identify where most of the emphasis occurred in assessing ILOs for the participants of the workshop an overall average was calculated for each course SLO that was evaluated. For instance, one respondent stated that one of the SLOs for Accounting 208 had some emphasis on decision-making (2) and problem solving (2), had a major emphasis on the analysis of information (3) and no emphasis on creative thinking (1). The responses were added and divided by 4 for an overall average of 2.00. This was done for each response. Table 3 illustrates the results from this analysis and indicates that the critical thinking, written and oral communication, and information literacy were emphasized the most in the assessment of learning outcomes for the participants of the workshop.

**Table 3: Overall Average on the Emphasis Rubric for each Institutional Learning Outcome Sorted in Descending Order.**

| ILO and Overall Average on Emphasis Rubric | N | Minimum | Maximum | Mean | Standard Deviation |
|---|---|---|---|---|---|
| Critical Thinking | 81 | 1.00 | 3.00 | 2.44 | .573 |
| Written & Oral Communication | 81 | 1.00 | 3.00 | 2.42 | .588 |
| Information Literacy | 81 | 1.00 | 3.00 | 2.30 | .785 |
| Society and Culture | 81 | 1.00 | 3.00 | 2.14 | .877 |
| Ethics and Values | 81 | 1.00 | 3.00 | 2.03 | .776 |
| Interpersonal and Group Skills | 81 | 1.00 | 3.00 | 1.96 | .777 |

Table 4 shows the frequency and percent of responses by ILO category and the response on the rubric. Sixty-four percent of the responses identified critical thinking as a major emphasis of their course learning outcomes, 59% identified written and oral communication, and 54% identified information literacy.

In order to identify the course SLOs that emphasized the ILOs the overall average described in Table 3 was used.  Referring to Table 5, the courses that have a major emphasis on the assessment of ILOs are the ones with an overall average of a 3.00.  Specifically, the courses that have a major emphasis on the assessment of critical thinking are CDE-182, ENGL-152, ENGL-160, ENGL-170, ENGL-250, ENGL-260, MATH-952, and PSYCH-102.  The courses that have a major emphasis on the assessment of written and oral communication are CHEM-102, CHEM-123, CHEM-213, ENGL-127, ENGL-160, ENGL-170, ENGL-250, ENGL-260, and ENGL-261.  The courses that have a major emphasis on the assessment of information literacy are CHEM-213, ENGL-127, ENGL-152, ENGL-160, ENGL-170, ENGL-250, ENGL-260, ENGL-261, and LIBR-100.

**Table 4: Institutional Learning Outcome Category by Response on the Emphasis Rubric (N = 81).**

| ILO | Institutional Learning Outcome Category | No Emphasis | | Some Emphasis | | Major Emphasis | |
|---|---|---|---|---|---|---|---|
| | | # | % | # | % | # | % |
| Critical Thinking | Decision-making | 15 | 18.5 | 12 | 14.8 | 54 | 66.7 |
| | Problem Solving. | 16 | 19.8 | 14 | 17.3 | 51 | 63.0 |
| | Analysis of information. | 5 | 6.2 | 6 | 7.4 | 70 | 86.4 |
| | Creative thinking across the disciplines | 27 | 33.3 | 22 | 27.2 | 32 | 39.5 |
| | **Critical Thinking Total** | **63** | **19.4** | **54** | **16.7** | **207** | **63.9** |
| Written & Oral Comm. | Are able to express ideas clearly in a variety of formats and contexts | 13 | .2 | 21 | .3 | 47 | .6 |
| | Read, listen, and interpret accurately | 5 | .1 | 17 | .2 | 59 | .7 |
| | Use appropriate technology to do so | 24 | .3 | 20 | .2 | 37 | .5 |
| | **Written and Oral Communication Total** | **42** | **17.3** | **58** | **23.9** | **143** | **58.8** |
| Interpersonal & Group Skills | Are able to work with others with respect, honesty, responsibility, empathy, and collaborative synergy | 17 | .2 | 26 | .3 | 38 | .5 |
| | Manage conflict | 45 | .6 | 14 | .2 | 22 | .3 |
| | Advocate for themselves with integrity | 38 | .5 | 10 | .1 | 33 | .4 |
| | Advocate for others | 36 | .4 | 15 | .2 | 30 | .4 |
| | **Interpersonal and Groups Skills Total** | **136** | **42.0** | **65** | **20.1** | **123** | **38.0** |
| Society & Culture | Are able to describe the social, cultural, and political forces at work in our diverse, global world | 32 | .4 | 8 | .1 | 41 | .5 |
| | Understand and appreciate different perspectives | 26 | .3 | 7 | .1 | 48 | .6 |
| | Are able to operate with civility in a complex world that involves changing social institutions and diverse world views | 33 | .4 | 13 | .2 | 35 | .4 |
| | **Society and Culture Total** | **91** | **37.4** | **28** | **11.5** | **124** | **51.0** |
| Information Literacy | Are able to apply research methods to access information and technology | 22 | .3 | 21 | .3 | 38 | .5 |
| | Can analyze, evaluate, synthesize, and use information resourcefully | 17 | .2 | 14 | .2 | 50 | .6 |
| | **Information Literacy Total** | **39** | **24.1** | **35** | **21.6** | **88** | **54.3** |
| Ethics and Values | Make informed, principled choices | 30 | .4 | 17 | .2 | 34 | .4 |
| | Foresee the consequences of their choices | 32 | .4 | 18 | .2 | 31 | .4 |
| | Solve moral dilemmas | 40 | .5 | 11 | .1 | 30 | .4 |
| | Express self-awareness | 34 | .4 | 12 | .1 | 35 | .4 |
| | Show social responsibility | 30 | .4 | 14 | .2 | 37 | .5 |
| | Evidence behavior guided by personal and professional ethics | 24 | .3 | 19 | .2 | 38 | .5 |
| | **Ethics and Values Total** | **190** | **39.1** | **91** | **18.7** | **205** | **42.2** |

Note: "#" refers to the number of responses, "%" is the number of responses divided by the total number of responses (N = 81).

**Table 5:** Overall Average on the Emphasis Rubric for each Institutional Learning Outcome by Course (N = 81).

| Course | Critical Thinking | Written & Oral Communication | Interpersonal & Group Skills | Society & Culture | Information Literacy | Ethics & Values |
|---|---|---|---|---|---|---|
| ACCT-208 | 2.18 | 2.45 | 1.16 | 1.18 | 2.36 | 1.52 |
| CDE-182 | 3.00 | 1.83 | 2.50 | 2.33 | 2.00 | 1.75 |
| CHEM-101 | 2.75 | 2.00 | 1.25 | 1.00 | 1.00 | 1.50 |
| CHEM-102 | 2.75 | 3.00 | 1.50 | 1.00 | 2.00 | 1.50 |
| CHEM-123 | 2.50 | 3.00 | 1.25 | 1.33 | 2.00 | 1.33 |
| CHEM-150 | 2.50 | 1.67 | 1.00 | 1.00 | 1.00 | 1.00 |
| CHEM-151 | 2.50 | 1.33 | 1.00 | 1.00 | 1.00 | 1.00 |
| CHEM-212 | 2.50 | 1.67 | 1.00 | 1.00 | 1.00 | 1.00 |
| CHEM-213 | 2.00 | 3.00 | 1.00 | 1.00 | 3.00 | 1.00 |
| ENGL-127 | 2.88 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| ENGL-152 | 3.00 | 2.83 | 2.63 | 3.00 | 3.00 | 3.00 |
| ENGL-160 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| ENGL-170 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| ENGL-250 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| ENGL-260 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| ENGL-261 | 2.83 | 3.00 | 3.00 | 3.00 | 3.00 | 3.00 |
| LIBR-100 | 2.68 | 2.76 | 2.43 | 2.57 | 3.00 | 2.71 |
| LIBR-101 | 1.00 | 1.00 | 1.00 | 1.00 | 2.50 | 1.00 |
| MATH-090 | 2.58 | 1.89 | 1.17 | 1.00 | 1.83 | 1.00 |
| MATH-250 | 2.75 | 2.00 | 1.25 | 1.00 | 3.00 | 1.00 |
| MATH-952 | 3.00 | 1.67 | 1.25 | 1.00 | 2.00 | 1.00 |
| MICRO-102 | 2.58 | 2.67 | 1.83 | 1.67 | 2.33 | 2.17 |
| MICRO-150 | 2.50 | 2.33 | 1.50 | 1.00 | 2.50 | 1.00 |
| PHIL-103 | 2.25 | 1.67 | 2.25 | 3.00 | 2.00 | 2.17 |
| PSYCH-102 | 3.00 | 2.67 | 2.25 | 1.00 | 2.00 | 2.33 |
| PSYCH-111 | 1.50 | 1.67 | 1.00 | 3.00 | 2.00 | 1.83 |
| RELIG-101 | 1.75 | 2.67 | 2.25 | 3.00 | 2.50 | 2.50 |
| SOC-100 | 1.42 | 1.67 | 1.58 | 2.67 | 1.33 | 1.56 |
| SOC-105 | 1.83 | 1.67 | 2.00 | 2.78 | 1.00 | 1.56 |
| SOC-141 | 1.50 | 1.89 | 1.67 | 2.33 | 1.00 | 1.67 |
| SOC-150 | 1.50 | 1.89 | 1.83 | 2.33 | 1.00 | 1.67 |
| SPAN-101 | 2.40 | 2.67 | 1.80 | 2.53 | 2.50 | 2.07 |
| SPAN-102 | 2.40 | 2.67 | 1.80 | 2.53 | 2.50 | 2.07 |
| SPAN-103 | 2.40 | 2.67 | 1.80 | 2.53 | 2.50 | 2.07 |
| SPAN-104 | 2.40 | 2.67 | 1.80 | 2.53 | 2.50 | 2.07 |

Note: The overall average refers to the average rating for each ILO. For instance, one respondent stated that one of the SLOs for Accounting 208 had some emphasis on decision-making (2) and problem solving (2), had a major emphasis on the analysis of information (3) and no emphasis on creative thinking (1); therefore, 2 + 2 + 3 + 1 = 8, divided by 4 because there are four categories within critical thinking, equals 2.00.

# Crafton Hills College (CHC)
## Courses and SLOs Mapped to Institutional Learning Outcomes (ILOs)

Dear Faculty, the purpose of this form is to help facilitate the process of Institutional Learning Outcome assessment. Please take a few minutes to answer the following questions. The information you provide will be used by the Outcomes Assessment Committee, the Instructional Assessment Specialist, and the Office of Research and Planning to accumulate course assessments that have already been conducted for each ILO and use that information to improve Crafton's progress on each ILO. If you have any questions about this form, please contact Rebeccah Warren-Marlatt, Vice President of Student Services, at (909) 389-3355.

**Faculty's First Name (Please Print in CAPITAL Letters)**

**Faculty's Last Name (Please Print in CAPITAL Letters)**

**Department**

**Course Name (e.g, CIS-163, RESP-133, etc.)**

**Course Learning Outcome**

For the course and learning outcome listed above, and each Institutional Learning Outcome, please identify the degree to which the course emphasizes each aspect of the Institutional Learning Outcome. Please keep in mind that one course and/or one outcome will not align with every ILO.

### ILO #1: Critical Thinking

**Students demonstrate critical thinking through...**

|  | No Emphasis | Some Emphasis | Major Emphasis |
|---|:---:|:---:|:---:|
| Decision-making | ○ | ○ | ○ |
| Problem Solving. | ○ | ○ | ○ |
| Analysis of information. | ○ | ○ | ○ |
| Creative thinking across the disciplines | ○ | ○ | ○ |

### ILO #2: Written and Oral Communication

**Students communicate effectively when they..**

|  | No Emphasis | Some Emphasis | Major Emphasis |
|---|:---:|:---:|:---:|
| Are able to express ideas clearly in a variety of formats and contexts | ○ | ○ | ○ |
| Read, listen, and interpret accurately | ○ | ○ | ○ |
| Use appropriate technology to do so | ○ | ○ | ○ |

## Please turn the page over or click next!

## ILO #3: Interpersonal and Group Skills

**Students demonstrate interpersonal and group skills when they...**

|  | No Emphasis | Some Emphasis | Major Emphasis |
|---|:---:|:---:|:---:|
| Are able to work with others with respect, honesty, responsibility, empathy, and collaborative synergy | ○ | ○ | ○ |
| Manage conflict | ○ | ○ | ○ |
| Advocate for themselves with integrity | ○ | ○ | ○ |
| Advocate for others | ○ | ○ | ○ |

## ILO #4: Society and Culture

**Students demonstrate their understanding of society and culture when they...**

|  | No Emphasis | Some Emphasis | Major Emphasis |
|---|:---:|:---:|:---:|
| Are able to describe the social, cultural, and political forces at work in our diverse, global world | ○ | ○ | ○ |
| Understand and appreciate different perspectives | ○ | ○ | ○ |
| Are able to operate with civility in a complex world that involves changing social institutions and diverse world views | ○ | ○ | ○ |

## ILO #5: Information Literacy

**Students demonstrate information literacy when they...**

|  | No Emphasis | Some Emphasis | Major Emphasis |
|---|:---:|:---:|:---:|
| Are able to apply research methods to access information and technology | ○ | ○ | ○ |
| Can analyze, evaluate, synthesize, and use information resourcefully | ○ | ○ | ○ |

## ILO #6: Ethics and Values

**Students demonstrate ethics and values when they...**

|  | No Emphasis | Some Emphasis | Major Emphasis |
|---|:---:|:---:|:---:|
| Make informed, principled choices | ○ | ○ | ○ |
| Foresee the consequences of their choices | ○ | ○ | ○ |
| Solve moral dilemmas | ○ | ○ | ○ |
| Express self-awareness | ○ | ○ | ○ |
| Show social responsibility | ○ | ○ | ○ |
| Evidence behavior guided by personal and professional ethics | ○ | ○ | ○ |

# Thank You!  Please click on the submit button
# or return the form to the Office of Research in Planning in the LRC.

# Appendix B

Table 1: Number of Outcomes Mapped by Department and Course.

| | Department | | | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | Business | CDE | Language | English | Human Development | Library | Math | Physical & Biological Sciences | Social Sciences | Sociology | |
| ACCT-208 | 11 | | | | | | | | | | 11 |
| CDE-182 | | 2 | | | | | | | | | 2 |
| CHEM-101 | | | | | | | | 1 | | | 1 |
| CHEM-102 | | | | | | | | 1 | | | 1 |
| CHEM-123 | | | | | | | | 1 | | | 1 |
| CHEM-150 | | | | | | | | 1 | | | 1 |
| CHEM-151 | | | | | | | | 1 | | | 1 |
| CHEM-212 | | | | | | | | 1 | | | 1 |
| CHEM-213 | | | | | | | | 1 | | | 1 |
| ENGL-127 | | | | 4 | | | | | | | 4 |
| ENGL-152 | | | | 4 | | | | | | | 4 |
| ENGL-160 | | | | 3 | | | | | | | 3 |
| ENGL-170 | | | | 2 | | | | | | | 2 |
| ENGL-250 | | | | 2 | | | | | | | 2 |
| ENGL-260 | | | | 3 | | | | | | | 3 |
| ENGL-261 | | | | 3 | | | | | | | 3 |
| LIBR-100 | | | | | | 7 | | | | | 7 |
| LIBR-101 | | | | | | 1 | | | | | 1 |
| MATH-090 | | | | | | | 3 | | | | 3 |
| MATH-250 | | | | | | | 2 | | | | 2 |
| MATH-952 | | | | | | | 2 | | | | 2 |
| MICRO-102 | | | | | | | | 3 | | | 3 |
| MICRO-150 | | | | | | | | 1 | | | 1 |
| PHIL-103 | | | | | | | | | 1 | | 1 |
| PSYCH-102 | | | | | 1 | | | | | | 1 |
| PSYCH-111 | | | | | 1 | | | | | | 1 |
| RELIG-101 | | | | | | | | | 1 | | 1 |
| SOC-100 | | | | | | | | | | 3 | 3 |
| SOC-105 | | | | | | | | | | 3 | 3 |
| SOC-141 | | | | | | | | | | 3 | 3 |
| SOC-150 | | | | | | | | | | 3 | 3 |
| SPAN-101-104 | | | 5 | | | | | | | | 5 |
| Total | 11 | 2 | 5 | 21 | 2 | 8 | 7 | 11 | 2 | 12 | 81 |

## Appendix C

### Table 2: Courses by Student Learning Outcomes.

| Course | Learning Outcome |
|---|---|
| ACCT-208 | Demonstrate the ability to describe the elements of the accounting process and preparation of basic financial statements. |
| | Demonstrate the ability to discuss accounting compliance issues as defined by the Sarbanes-Oxley Act. |
| | Demonstrate the ability to explain and apply basic accounting principles including generally accepted accounting principles (GAAP) |
| | Discuss economic, political and ethical issues and their impact upon business policies and practices |
| | Explain and apply basic accounting principles |
| | Present and discuss contemporary business principles, practices and organizations |
| | Students will be able to demonstrate their understanding of financial statements by creating a trail balance, income statement, statement of owner's equity and balance sheet from data given and expressing what those statements indicate. |
| | Students will be able to demonstrate their understanding of the accounting cycle by solving a complex problem that spans the fiscal year, from the opening of the year to the yearend closing entries. |
| | Students will demonstrate the ability to define and complete the steps in the accounting cycle including journalizing and posting financial transactions, recording adjusting and closing entries, and preparation of financial reports. |
| | Students will demonstrate the ability to identify and record changes in assets, liabilities and owner's equity through the recording and posting of journal entries. |
| | Students will demonstrate the ability to prepare and explain the purpose, structure, content, and underlying principles of the general-purpose financial statements including the income statement, balance sheet, statement of changes in stockholders' equity, and statement of cash flows. |
| CDE-182 | CRITICALLY ASSESS/DEMONSTRATE THE COMPONENTS OF CULTURALLY RELEVANT AND RESPONSIVE PHYSICAL AND SOCIAL ENVIRONMENTS TO CREATE RESPECTFUL, RECIROCAL RELATIONSHIPS THAT SUPPORT AND EMPOWER FAMILIES, CHILDREN AND TEACHERS |
| | DEMONSTRATE STRATEGIES FOR HELPING CHILDREN NEGOTIATE AND RESOLVE CONFLICTS WITH A FOCUS ON USING AN ANTI-BIAS APPROACH IN THE CLASSROOM |
| CHEM-101 | Critical thinking in chemistry including interpretation, evaluation, explanation, and critical inquiry; how to ask appropriate questions, gather relevant information efficiently and creatively, sort through this information, reason logically from this information efficiently and come to reliable and trustworthy conclusions. |
| CHEM-102 | The ability to collect, analyze, and articulate results clearly and effectively in speech and in writing in an acceptable style of presentation.  The ability to follow directions given both in written and verbal form. |
| CHEM-123 | Knowledge of the basic areas of chemistry such as the structure and properties of matter, the transformations from one form of matter to another and the associated energy transformations. |
| CHEM-150 | The ability to do problems involving reaction stoichiometry. |
| CHEM-151 | The ability to apply mathematics to chemical measurements |
| CHEM-212 | The ability to distinguish, construct and compare organic compounds utilizing structure, physical properties, nomenclature, synthesis and reactions. |
| CHEM-213 | The ability to collect, analyze, and articulate results clearly and effectively in speech and in writing in an acceptable style of presentation.  The ability to follow directions given both in written and verbal form. |
| ENGL-127 | 1. Students will identify, discuss, and analyze the elements of literature. |
| | 2. Students will choose artwork and literature for inclusion of the school literary magazine. |
| | 3. Students will layout and design the school literary magazine. |
| | 4. Students will develop criteria for evaluating the quality of submissions. |
| ENGL-152 | |
| | 1. Interpret, analyze, and evaluate poems, short stories, novels, and plays. |
| | 2. Conduct, incorporate and properly document basic research from various sources to produce an original thesis for an essay. |
| | 3. Evaluate an author's use of the elements of poetry, prose, and drama including rhyme, meter, diction, figurative language, tone, theme, plot, action, characterization, and genre. |

(Table 2 continues!)

(Table 2 continued!)

| Course | Learning Outcome |
|---|---|
| ENGL-160 | 1. Students will be able to demonstrate their ability to recognize and discuss distinguishing literary characteristics related specifically to the course focus and its contexts. |
| | 2. Students will be able to support literary assertions with textual references. |
| | 3. Students will be able to write an essay analyzing one or two literary works that is unified, coherent, clearly written, and well developed with textual references. |
| ENGL-170 | 1. Students will identify, discuss, and analyze the elements of film. |
| | 2. Students will write critical and analytical essays on film as text. |
| ENGL-250 | 1. Students will discuss and analyze the elements of a specific fiction category. |
| | 2. Students will write critical and analytical essays on short stories and fiction in a specific genre. |
| ENGL-260 | 1. Students will be able to identify, evaluate, and analyze the works and authors in the period of encounter and discovery. |
| | 2. Students will be able to identify, evaluate, and analyze the works and authors in the period of colonial American from approximately 1700-1820. |
| | 3. Students will be able to identify, evaluate, and analyze the works and authors in the period of U.S. history from approximately 1820-1865. |
| ENGL-261 | 1. Students will be able to identify, evaluate and analyze the works of authors relevant to post-Civil War, modern, and contemporary American literature. |
| | 2. Students will be able to identify, evaluate and analyze the works of authors in the period from approximately 1865-1900. |
| | 3. Students will be able to identify, evaluate and analyze the works of authors in the period of U.S. history from approximately 1900-2000. |
| LIBR-100 | Students are able to communicate information effectively to an audience. |
| | The student demonstrates awareness of the ethical and legal issues of accessing and using source information. |
| | The student effectively accesses a variety of information. |
| | The student effectively evaluates information |
| | The student effectively uses information |
| | The student is able to recognize the need for information. |
| | To access, analyze, synthesize, evaluate and use various forms of information. |
| LIBR-101 | Information Literacy |
| MATH-090 | 10. The student will be able to identify various types of algebraic expressions/equations as appropriate to the course. |
| | 7. Perform the operations of addition, subtraction, multiplication and division on polynomials using correct exponent rules. |
| | Perform the operations of addition, subtraction, multiplication and division on polynomials using correct exponent rules. |
| MATH-250 | 1. The student will evaluate and analyze integrals as appropriate to first year calculus. |
| | The student will evaluate limits, including proofs, for linear functions. |
| MATH-952 | 16. Without a calculator, the student will be able to perform the four operations with positive rational numbers. |
| | 17. Without a calculator, the students will evaluate expressions using the order of operations in the performance of using the 4 operations emphasizing signed numbers. |
| MICRO-102 | Students will demonstrate basic laboratory skills and write a well-organized and informative lab report as appropriate for courses in microbiology |
| | Students will gain an understanding of the interactions between microorganisms and the environment. |
| | Students will learn to formulate questions and apply the scientific method to answer those questions. |
| MICRO-150 | Students will learn to collect information, create a flow chart and to successfully navigate through that flow chart. (This relates to the project referred to as the Second Unknown) |
| PHIL-103 | Distinguish between deductive and inductive arguments. |
| PSYCH-102 | To recognize, describe and analyze individual behaviors in one or more social institutions that influence our world. |
| PSYCH-111 | Student can identify and describe the concepts, methods, techniques and research associated with understanding lifespan development. |
| RELIG-101 | To identify and evaluate the historical and cultural context of the human experience as it relates to his/her perspective of that experience. |

(Table 2 continues!)

(Table 2 continued!)

| Course | Learning Outcome |
|---|---|
| SOC-100 | 2. Students will be able to recognize and give examples of social class. |
| | 3. Students will participate in service learning by donating 10 hours of service to their community. |
| | Students will be able to define and discuss the ten components of culture. |
| SOC-105 | 1. Components of a social problem. |
| | 2. Effects of American Social Problems on the rest of the world. |
| | 3. Solutions for social problems. |
| SOC-141 | 1. Define minority |
| | 2. Discuss aspects of cultural assimilation. |
| | 3. Explain the treatment of minority groups. |
| SOC-150 | 1. Students will be able to record life history of an elderly person. |
| | 3. Students will be able to explain the benefits of having studied aging and the elderly. |
| | Students will be able to recognize issues faced by the elderly. |
| SPAN-101, 102, 103, and 104 | Students will be able to apply their knowledge of Spanish language and culture beyond the classroom in interactions within multicultural communities in the world. |
| | Students will define the concept of culture, appreciate other cultures and interact with members of those cultures in relation to their own. |
| | Students will demonstrate appropriate knowledge of Spanish speaking world regarding social interactions, beliefs, values, arts, literature, music, and geography. |
| | Students will demonstrate language proficiency by writing and speaking Spanish at a beginning to intermediate level. |
| | Students will interpret written and spoken messages in Spanish at a beginning to intermediate level. |