



OAKLAND
COMMUNITY
COLLEGE®

WELCOME TO THE CURRICULUM REVIEW SELF-STUDY PROCESS

Discipline/Program CIS-SWE-AAS Coordinator(s) Bill Schanerberger
(Software Engineering)

CRC Mentor _____ Review Date: April 13, 2007

Thank you for agreeing to coordinate the Curriculum Review in your area. As Discipline/Program Case Review Coordinator, it is your responsibility to make sure the steps detailed below are completed by the Review Date. Your packet includes instructions and forms for completing the Review. If needed, a CRC mentor is available to you. Your Dean will also be able to provide meaningful assistance in completing this important task.

In the Part I-Core Review, the College asks your discipline/program to analyze its curriculum from a variety of perspectives. These include course offerings and contents, enrollment/retention, transfer trends, and plans for the future. An additional section of activities is contained in Part II. The nature of these review activities will depend on whether you are a member of a Discipline or a Program.

Included in this document to help you work on your review are: 1) Data Collection forms to distribute to your Discipline/Program Case colleagues and 2) Data Analysis forms with summary sections. Allow two to three months for this work. Please send all completed forms to the Chair of CRC 3 weeks prior to your scheduled review.

Once again, thank you for agreeing to work on this very important process with your colleagues. Together we will constantly strive to ensure the excellence of instruction at OCC.

College Curriculum Review Membership 2006-2007

Imagene Bailey (OR)
Thomas Boozer (AH)
Nadia Boulos (HL)
Charlott Couch (RO/SF)
Diane Hill (OR)

Tony Ingram (OR)
Shelley Larson (RO/SF)
Darlene Levinson (OR)
Gail Mays (AH)-Chair
Michele Merritt (AH)

Janet Peart (AH)
Letyna Roberts (ex-officio)
Karen Robinson (HL)
Beverly Stanbrough (RO/SF)
David Mathews (RO/SF)

CURRICULUM REVIEW SELF-STUDY PROCESS FOR DISCIPLINE/PROGRAM COORDINATORS

Coordinator: The bold type below indicates forms that are attached and also available on the P drive. Check off steps as completed.

- Step 1**—Request that the Office of Assessment & Effectiveness (contact information available on InfoMart) to send you the Dashboard data for your Discipline/Program.
- Step 2**—If you are an occupational program coordinator, distribute the **PROE surveys** to faculty, students, and advisory committees. Return completed surveys to the OCC's Office of State and Federal Programs 6 weeks before your scheduled review.
- Step 3**—Send the **Data Collection forms** to all the full-time faculty and/or adjunct members of your Discipline/Program, as specified on each form.
- Step 4**—Collect syllabi from all adjuncts and full-time faculty for every course they are teaching, and complete the **Data Collection forms** for each course.
- Step 5**—After collecting the above data, complete the **Data Analysis forms** to help you organize and analyze the information you've gathered.
- Step 6**— Complete the Curriculum Review Report by compiling the **Data Analysis** forms
- Step 7**—Forward a DRAFT copy of your compiled Discipline/Program Curriculum Review Report along with a **Faculty Sign-off form** to all faculty participating in the review at least 6 weeks prior to your review appointment. NOTE: As part of the official CRC Review Document, please include the returned Faculty Sign-Off forms.
- Step 8**—Send a completed hard copy of all completed forms (including the **Data Collection, Data Analysis forms**) to the Chairperson of the Curriculum Review Committee at least 3 weeks prior to your review, along with enough copies of your completed report for each committee member. The Chairperson will distribute them.
- Step 9**—Present the Discipline/Program Self-Study to the Curriculum Review Committee on the appointed date.

The Curriculum Review Committee will then provide your Discipline/Program with recommendations and suggestions and share the results of your review with the College Academic Senate, Vice-Chancellor of Academic and Student Services, and the Office of Assessment & Effectiveness.

CRC
PART I-CORE REVIEW

Coordinator: Data Collection and Data Analysis forms for the following review areas are attached. Please also attach a copy of your program requirements from the catalog and all course descriptions.

A. CATALOG COURSE DESCRIPTIONS

- Please reproduce copies of all your Discipline/Program catalog course descriptions, and distribute them to the full-time members of the Discipline/Program with the Data Collection form asking the faculty to comment on whether the catalog course descriptions are accurate, clear, and current.
- Analyze the responses in order to determine where there is a need for revision.

B. SYLLABUS REVIEW

- Collect syllabi from all full-time and adjunct faculty for every section of each courses listed in the catalog under your Discipline/Program.
- Analyze where there are inconsistencies or omissions in the syllabi.

C. ENROLLMENT TRENDS AND STUDENT RETENTION

- Collect the Dashboard enrollment and retention data for the current and last academic year (available from the Office of Assessment & Effectiveness).
- Analyze areas of strength and weakness. Discuss, where applicable, student recruitment and student retention strategies that your Discipline/Program participates in currently or intends to implement in the future.

D. DISCIPLINE/PROGRAM NEEDS AND RESOURCES

- Collect information on the Discipline/Program's current and anticipated needs and resources by distributing the Data Collection form to all full and adjunct faculty.
- Discuss what resources and staff development activities your Discipline/Program needs and also indicate necessary curriculum changes/revisions where appropriate.

DATA COLLECTION

CORE REVIEW

A. CATALOG COURSE DESCRIPTION

FOR: _____
Course Number

Coordinator: Distribute this form to all full-time members of the discipline/program for every course listed in the catalog.

CATALOG COURSE DESCRIPTION:

	Yes	No
Accurate	<input type="checkbox"/>	<input type="checkbox"/>
Clear	<input type="checkbox"/>	<input type="checkbox"/>
Current	<input type="checkbox"/>	<input type="checkbox"/>
NUMBER OF CREDITS		
Appropriate	<input type="checkbox"/>	<input type="checkbox"/>

Please explain any **NO** answer:

Please return to _____ at _____ by _____
Name Campus Date

DATA ANALYSIS

CORE REVIEW

A. CATALOG COURSE DESCRIPTION

Coordinator: Complete this form after reviewing the Catalog Course Data Collection forms from members of your Discipline/Program on all of the courses listed in the Catalog. Please also attach a photocopy of all program requirements and course descriptions in the catalogue.

Software Engineering Degree and Certificate Requirements

Core Requirements		Credits
<u>CIS 1100</u>	Fundamentals of Information Systems	4
<u>CIS 1200</u>	Introduction to Database Systems	4
<u>CIS 1300</u>	Networking Concepts	4
<u>CIS 1400</u>	Introduction to Web System	4
<u>CIS 1500</u>	Introduction to Software Engineering	4
Total Core Credits		20

Required Supportive Courses (associate degree only)		
<u>ACC 1500</u>	Fundamental Accounting	3
Or		
<u>ACC 2510</u>	Principles of Accounting	4
<u>BUS 1100</u>	Introduction to Business	4
<u>ENG 1350</u>	Business Communication	3
Or		
<u>ENG 1510</u>	Composition I	3
<u>MAT 1150</u>	Intermediate Algebra	4
Or		
<u>MAT 1580</u>	Statistics	4
<u>SPE 1290</u>	Interpersonal Communication	3

Software Engineering Option (CIS.SWE.AAS)		Credits
<u>CIS 2151</u>	Object-Oriented Programming (Java)	4
<u>CIS 2252</u>	Object-Oriented Programming (C++)	4
<u>CIS 2353</u>	Data Structures	4
<u>CIS 2454</u>	Web System Development (JSP)	4
Total Option Credits		16

Also, select two (2) additional courses (as option electives) from the following list.

Software Engineering Option Electives		
<u>CIS 2250</u>	COBOL Software Development	4
<u>CIS 2515</u>	Database Design and Management	4
<u>CIS 2555</u>	Web System Development (ASP)	4
<u>CIS 2656</u>	Visual Basic Programming	4
<u>CIS 2757</u>	C# Programming	4
<u>CIS 2818</u>	Wireless and Mobile Systems	4
<u>CIS 2838</u>	System Security	4
<u>CIS 2858</u>	Integration and Advanced Web Systems	4
<u>CIS 2859</u>	Graphics and Game Programming	4
Credits for Option Electives		8
Total Option Credits		24

List every course that is listed in the catalog. Check where revision is indicated or no revisions seem necessary. Please, add lines where needed.

	Revision needed	No Revision necessary
Course Number <u>1050</u> (core requirement)	<u>X</u> (one word change)	_____
Course Number <u>1100</u> (core requirement)	_____	<u>X</u>
Course Number <u>1200</u> (core requirement)	_____	<u>X</u>
Course Number <u>1300</u> (core requirement)	_____	<u>X</u>
Course Number <u>1400</u> (core requirement)	<u>X</u> (tool-specific language)	_____
Course Number <u>1500</u> (core requirement)	_____	<u>X</u>
Course Number <u>2151</u> (option requirement)	_____	<u>X</u>
Course Number <u>2252</u> (option requirement)	_____	<u>X</u>
Course Number <u>2353</u> (option requirement)	_____	<u>X</u>
Course Number <u>2454</u> (option requirement)	_____	<u>X</u>
Course Number <u>2250</u> (option elective)	_____	<u>X</u>
Course Number <u>2515</u> (option elective)	_____	<u>X</u>
Course Number <u>2555</u> (option elective)	_____	<u>X</u>
Course Number <u>2656</u> (option elective)	_____	<u>X</u>
Course Number <u>2757</u> (option elective)	_____	<u>X</u>
Course Number <u>2818</u> (option elective)	_____	<u>X</u>
Course Number <u>2838</u> (option elective)	_____	<u>X</u>
Course Number <u>2858</u> (option elective)	_____	<u>X</u>
Course Number <u>2859</u> (option elective)	<u>X</u> (remove prerequisite)	_____

CATALOG COURSE DESCRIPTION REVIEW SUMMARY:

Degree Requirements

As shown above in the degree requirements for software engineering, the courses which students must take are divided into three categories: core requirements; option requirements; and option electives. All CIS degrees and companion certificates available from fall 2004 to today originally required a set of five core courses that provide a foundation for all subcategories of information system study. Recently, a sixth course (CIS 1050 Personal Computer Productivity Tools) was added to this set but has not been updated in the printed catalog. The next set of four courses (i.e., the option requirements) contains the most important material related to the software engineering degree that makes it distinct from other degrees and certificates. The final set of two courses provides a small amount of flexibility for students to choose additional topics of interest but from a list that still relates to software engineering.

Course Descriptions

The CIS instructors have always been diligent in reviewing course descriptions and proposing corrections when needed. Therefore, only minor changes are occasionally necessary and are typically due to changes in the technology industry.

- In the case of CIS 1050, Microsoft now uses slightly different language to describe IT professionals trained in use of their Office products. Therefore, the course description should be updated to reflect the new language.
- In the case of CIS 1400, additional language is needed to reflect latest version of specific software tools used in the course.
- In the case of CIS 2859, there are now new software tools that beginning game programmers may use to develop game software. Previously, experience with the C++ programming language was required before other game software could be used.

DATA COLLECTION
CORE REVIEW

B. SYLLABUS REVIEW

FOR: _____
Course Number

INSTRUCTORS ⇨																			
Mandatory Items (per FMA and Federal Law)																			
ADA Notification																			
Course Goals																			
Grading Standards and Practices																			
Tentative Schedule of Assignments and Tests																			
Recommended Items (per Academic Senate)																			
Course Name and Number																			
Instructor, Office Location, Method of Contact																			
Office Hours																			
Available Assistance																			
Course Catalog Description with Prerequisites																			
General Education Attributes (where pertinent)																			
Required Books and Supplies																			
List of Supportive Materials (where available)																			
Evaluation/Testing System & Policies																			
Attendance Policy																			
Safety Instructions																			
Disclaimer Allowing for Reasonable Revisions																			
Optional Items																			
Semester Meeting Times & Room																			
Teaching/Learning Strategies																			
Applicable Forms Pertinent to Course																			
Reference to Student Policies in OCC Catalog																			
Policy on Use of Computing Resources																			
Description of Required Computing Skills																			
Policy on Plagiarism																			
Student Bill of Responsibilities																			

Coordinator: Ask all full-time and adjunct faculty to send you the syllabi for all of their courses by a given date. Use this form to collect information about their syllabi.

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 1050	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	7	86%
Course Goals	7	100%
Grading Standards and Practices	7	100%
Tentative Schedule of Assignments and Tests	7	100%
Recommended Items (per Academic Senate)		
Course Name and Number	7	100%
Instructor, Office Location, Method of Contact	7	100%
Office Hours	7	100%
Available Assistance	7	100%
Course Catalog Description with Prerequisites	7	100%
General Education Attributes (where pertinent)	7	N/A
Required Books and Supplies	7	100%
List of Supportive Materials (where available)	7	86%
Evaluation/Testing System & Policies	7	100%
Attendance Policy	7	100%
Safety Instructions	7	N/A
Disclaimer Allowing for Reasonable Revisions	7	86%
Optional Items		
Semester Meeting Times & Room	7	100%
Teaching/Learning Strategies	7	43%
Applicable Forms Pertinent to Course	7	N/A
Reference to Student Policies in OCC Catalog	7	57%
Policy on Use of Computing Resources	7	71%
Description of Required Computing Skills	7	71%
Policy on Plagiarism	7	71%
Student Bill of Responsibilities	7	43%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 1100	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	0%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	100%
Student Bill of Responsibilities	1	100%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 1200	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	100%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	100%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 1300	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location; Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	100%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	100%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 1400	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 1500	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2151	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2252	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2353	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2454	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2250	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	0%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2515	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	100%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	100%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2555	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	0%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	0%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	0%
Attendance Policy	1	0%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	0%
Policy on Use of Computing Resources	1	0%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2656	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	0%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2757	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	0%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	0%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	0%
Attendance Policy	1	0%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	0%
Policy on Use of Computing Resources	1	0%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW

Coordinator: Use a separate sheet for each course.

Course Number 2818, 2858, and 2859	Number of Sections	Percent of Inclusion
Mandatory Items (per FMA and Federal Law)		
ADA Notification	1	100%
Course Goals	1	100%
Grading Standards and Practices	1	100%
Tentative Schedule of Assignments and Tests	1	100%
Recommended Items (per Academic Senate)		
Course Name and Number	1	100%
Instructor, Office Location, Method of Contact	1	100%
Office Hours	1	100%
Available Assistance	1	100%
Course Catalog Description with Prerequisites	1	100%
General Education Attributes (where pertinent)	1	N/A
Required Books and Supplies	1	100%
List of Supportive Materials (where available)	1	100%
Evaluation/Testing System & Policies	1	100%
Attendance Policy	1	100%
Safety Instructions	1	N/A
Disclaimer Allowing for Reasonable Revisions	1	100%
Optional Items		
Semester Meeting Times & Room	1	100%
Teaching/Learning Strategies	1	0%
Applicable Forms Pertinent to Course	1	N/A
Reference to Student Policies in OCC Catalog	1	100%
Policy on Use of Computing Resources	1	100%
Description of Required Computing Skills	1	100%
Policy on Plagiarism	1	0%
Student Bill of Responsibilities	1	0%

DATA ANALYSIS

CORE REVIEW

B. SYLLABUS REVIEW, (CONTINUED)

Coordinator: After reviewing the Data Analysis forms on all the courses in the Discipline/Program, please summarize your analysis of whether or not there are course syllabi in your Discipline/Program that need revision due to inconsistencies or omissions, or other issues.

SYLLABUS REVIEW SUMMARY:

In general, the inclusion of required items in CIS syllabi is excellent. Also, the inclusion percentage of relevant optional items is reasonably good. A few years ago (when CIS did a complete re-design of the curriculum), a syllabus template was created and made available on a web site for all full-time and adjunct instructors to use. The template provided examples of required items and a few optional items. In the following semesters, compliance improved.

The current review process revealed a few required items missing in a few syllabi written by adjunct instructors. This problem may be corrected simply by having the department chair at each campus communicate with each adjunct instructor and reinforce the need to create compliant syllabi.

DATA ANALYSIS

CORE REVIEW

C. ENROLLMENT TRENDS AND STUDENT RETENTION

Coordinator: *The Dashboard report on your Discipline/Program will collect the necessary data in regard to Enrollment Trends and Student Retention. Use this form to review that data in the following areas. Please also attach Dashboard Data.*

Enrollment (Use the Dashboard data on Average Section Size, Sections Filled to Capacity, Percent of Completed Sections, Percent Change in Headcount, and Percent Change in Credit Hours to discuss this area.)

Minority Students (Use the Dashboard data on Minority Students to discuss this area.)

Student and Course Success (Use the Dashboard data on Percent of Withdrawals, Percent of Incompletes, and Student Course Completion Rate to discuss this area.)

Summary of data from OCC Office of Assessment and Effectiveness.

	CIS (all programs)			College-Wide
	2003-2004	2004-2005	2005-2006	2005-2006
Average Section Size	23/27	22/27	22/27	?
Sections Filled to Capacity	84.0%	79.8%	80.6%	83.2%
Percent of Completed Sections	77.7%	65.8%	77.9%	86.6%
Headcount Trend Ratio	0.89	0.86	0.93	1.02
Credit Hour Trend Ratio	0.89	0.85	0.92	1.02
Percent of Minority Students	30.0%	30.8%	30.4%	27.9%
Percent of Withdrawals	16.0%	16.4%	16.7%	17.8%
Percent of Incompletes	0.9%	1.5%	1.3%	1.6%
Student Course Completion Rate	59.3%	64.7%	63.6%	68.2%

ENROLLMENT TRENDS AND STUDENT RETENTION REVIEW SUMMARY:

CIS enrollment steadily increased from 1995 to 2001 and then steadily decreased from 2001 to 2005 which resulted in an overall decrease of approximately 21% over the ten year period. Between 2001 and 2005, CIS enrollment had been negatively affected by the public scare of "off-shoring" (i.e., sending work overseas to cheap labor). In reality, the downward trend in IT employment due to off-shoring has primarily affected those jobs with the title of "programmer" and not all IT positions. (See labor trends analysis below.) Before the CIS curriculum was completely re-designed in 2004, most courses and programs were related to programming skills. Therefore, with the off-shoring impact on programming and the focus of CIS prior to fall 2004, it was no surprise that the enrollment decreased significantly. The new CIS curriculum has many new courses, certificates, and degrees with little focus on programming. Only one degree and one certificate in the new curriculum are similar to the old "programmer" degree and certificate. However, the new programs use the title "Software Engineering" and are significantly different from programming in terms of required skills and training.

Information technology is used by most companies and many began looking for ways to acquire the necessary computer services through the use of cheap labor from other countries. There was a lot of press given to the off-shoring phenomenon and many potential students backed away from CIS training thinking that most computer jobs would be gone in the next 5 to 10 years. This perception was greatly exaggerated and took a few years for prospective CIS students to learn that the negative impact was focused primarily on programming and that other IT positions are expected to see high future growth. In contrast to the initial public perceptions, data from the U.S. Bureau of Labor Statistics and the State of Michigan Department of Labor and Economic Growth illustrates very positive growth of opportunities for most IT job categories through 2012 and 2014. (See labor trends analysis below.) In just the last two school years (2005-2007) there has been a sharp increase in the CIS enrollment figures. Also, other government reports (including statements from the former U.S. Secretary of Labor) supports projections that off-shoring of IT work may eventually amount to only about 15-18% of all the IT work in this country.

Headcount and credit hour trends are now growing upward and approaching college-wide averages.

In 2004, CIS introduced a completely re-designed curriculum with new degrees, certificates, and courses. It is natural to expect some "break in" period during which students slowly discover new offerings and adjustments are made to scheduling. These schedule adjustments resulted in an increased level of cancellations (i.e., **percent of completed sections** = 65.8) but has since improved significantly now that we have a better understanding of how many sections of new courses we should offer and at what times of the day and week.

The **percent of minority students** in CIS classes continues to be strong each year and has always been above college-wide averages.

The remaining results for **percent of withdrawals**, **percent of incompletes**, and **student course completion rate** show values that are certainly reasonable for a technically-oriented curriculum and still close to college-wide averages.

In conclusion, the latest statistics indicate that things are going in the right direction and that the worst of the off-shoring scare and the adjustment period for new offerings is behind us.

DATA COLLECTION

CORE REVIEW

D. DISCIPLINE/PROGRAM NEEDS AND RESOURCES

Coordinator: Distribute this form to all full-time and adjunct faculty.

What resources or services does the Discipline/Program need in order to improve instruction? Please explain the reason you are requesting each resource.

What curriculum revisions or development would enhance instruction in your Discipline/Program?

Please return to _____ *at* _____ *by* _____.
Name Campus Date

DATA ANALYSIS

CORE REVIEW

D. DISCIPLINE/PROGRAM NEEDS AND RESOURCES

Coordinator: Please summarize the needs, resources, and curriculum actions indicated on the Data Collection forms.

What resources or services does your Discipline/Program need?

Summary of needs for Software Engineering Program

- Need quicker turnover of technology to provide up-to-date tools for student hands-on activities.
- Need freedom to use CIS course fees on any software or hardware items for student use.

What curriculum revisions or development does your Discipline/Program see as beneficial to instruction?

None submitted.

DISCIPLINE/PROGRAM NEEDS AND RESOURCES REVIEW SUMMARY:

Summary Comments on Software Engineering Programs

Job opportunities for software developers are greater for those who have formal engineering skills rather than simple programming skills. Higher-level training (e.g., four-year degree plus experience) has become essential for software professionals due to availability of cheap labor programming services. Therefore, the software engineering classes at OCC need to tie into other four-year programs and prepare students for additional formal education. In support of this, we also need to keep our software and hardware resources current and compatible with industry trends.

CRC
PART II- PROGRAM REVIEW
and
PROGRAM REVIEW OF OCCUPATIONAL EVALUATION (PROE)

Under the provisions of the Carl D. Perkins Vocational and Technical Education Act/Public Law 105-332, if a Program is of an occupational nature, a Program Review in Occupational Education (PROE) report is required by the State of Michigan every five (5) years and can be used for the purposes of the Curriculum Review process.

Coordinator: Data Collection and Data Analysis forms for the following review areas are attached.

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY

- Collect information from faculty, students and external community (e.g., advisory committees and accrediting agencies) on your Program curriculum. It is recommended that you send or personally distribute these survey forms in your classes, during your advisory committee meetings, and/or at your departmental/staff meetings. Return these survey forms to the Office of State and Federal Programs.

Required survey forms:

- Individual Faculty Perceptions of Occupational Programs Forms
- Individual Student Perceptions of Occupational Programs Forms
- Individual Advisory Committee/Industry Perceptions of Occupational Program Forms

- Analyze the data you have received from the internal and external community surveys. Record your findings on the PROE Data Analysis form and Final Review Summary

F. COMPARABLE COURSES/PROGRAMS AND TRENDS

- Collect information on transferability and articulation from the Counseling Department. Obtain labor market trends from the Office of Assessment & Effectiveness. Identify the job performance requirements with the aid of advisory committees, professional journals, along with student and employer feedback.
- Analyze and summarize these findings.

G. OUTCOMES ASSESSMENT

- Analyze the results of your most recent Program Assessment Plan, particularly evidence regarding the quality of student learning, and recommended action plans.

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY

OAKLAND COMMUNITY COLLEGE FACULTY PERCEPTIONS OF OCCUPATIONAL PROGRAMS (Program Review of Occupational Evaluation - PROE)

Thank you for taking the time to complete the following survey as it will help to improve upon the success of the occupational programs at Oakland Community College. **Please circle the letter that corresponds to your selection.**

Please circle only one letter.

1. The program of study in which I teach at Oakland Community College is meeting my expectations as a faculty member.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

2. The courses offered in the program are preparing the students for the workforce.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

3. The program can be more challenging academically for the students.
 - a. Agree
 - b. Neutral
 - c. Disagree
 - d. Strongly Disagree

4. The program can be more competitive with other institutions that offer similar programs.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY (*continued*)

**OAKLAND COMMUNITY COLLEGE
FACULTY PERCEPTIONS OF OCCUPATIONAL PROGRAMS
(Program Review of Occupational Evaluation - PROE)**

9. I feel that the students are prepared for the rigors of the program.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

10. I am informed about what is happening in this program.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

11. Opportunities are available for me to make suggestions for improvements in this program.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

12. I think the department has a commitment to student success in the program.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY (*continued*)

**OAKLAND COMMUNITY COLLEGE
FACULTY PERCEPTIONS OF OCCUPATIONAL PROGRAMS
(Program Review of Occupational Evaluation - PROE)**

5. I am satisfied with the quality of instruction provided to the students in this program.
- a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree
6. My fellow faculty members in the program are knowledgeable about the course subject-matter.
- a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree
7. I am satisfied with the course offerings in this program.
- a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree
8. I feel that the program has a focus real-world application.
- a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY (*continued*)

**OAKLAND COMMUNITY COLLEGE
FACULTY PERCEPTIONS OF OCCUPATIONAL PROGRAMS
(Program Review of Occupational Evaluation - PROE)**

13. I am satisfied with the direction of this program because ;
- a. I think it prepares students for employment in the workforce.
 - b. Working in conjunction with the advisory committee keeps the program going in the right direction.
 - c. Feedback that I have received from the students indicates that the program is headed in the right direction.
 - d. I know that other programs at other institutions do not compare to OCC.

14. If there is one thing you would like to change about the program, explain what it is and how it would enhance the program.

Thank you for taking the time to complete this survey!

Name: _____

Industry Type/Agency: _____

What OCC Program do you advise for : _____

Date Completed: _____

Please Return To: Letyna A. Roberts
Oakland Community College, Office of State and Federal Programs, AH Campus

Due Date: _____

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY

OAKLAND COMMUNITY COLLEGE STUDENT PERCEPTIONS OF OCCUPATIONAL PROGRAMS (Program Review of Occupational Evaluation - PROE)

Thank you for taking the time to complete the following survey as it will help to improve upon the success of the occupational programs at Oakland Community College. **Please circle the letter that corresponds to your selection.**
Please circle only one letter.

1. What is your program of study? _____
2. What is your career goal? _____
3. My program of study at Oakland Community College is meeting my expectations.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree
4. The courses offered in my program of study are preparing me for the workforce.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree
5. I would like to change my current program of study because of academic reasons.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY *(continued)*

**OAKLAND COMMUNITY COLLEGE
STUDENT PERCEPTIONS OF OCCUPATIONAL PROGRAMS
(Program Review of Occupational Evaluation - PROE)**

6. I would like to attend another institution because of dissatisfaction with my current program of study at Oakland Community College.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

7. I am satisfied with the quality of the instructors in my program of study.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

8. I feel that the instructors are knowledgeable about the course subject-matter.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

9. I am satisfied with the course offerings in my current program of study at Oakland Community College.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY *(continued)*

**OAKLAND COMMUNITY COLLEGE
STUDENT PERCEPTIONS OF OCCUPATIONAL PROGRAMS
(Program Review of Occupational Evaluation - PROE)**

10. My instructors help me to understand how useful my program of study can be in the real-world.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

11. My instructors make the course subject-matter seem interesting.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

12. I am informed about what is happening in my program.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

13. I think the department is committed to student success in the program.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY *(continued)*

**OAKLAND COMMUNITY COLLEGE
STUDENT PERCEPTIONS OF OCCUPATIONAL PROGRAMS
(Program Review of Occupational Evaluation - PROE)**

14. I am satisfied with my program of study.

- a. Strongly Agree
- b. Agree
- c. Neutral
- d. Disagree
- e. Strongly Disagree

15. If there is one thing you would like to change about the program, explain what it is and how it would enhance the program.

Thank you for taking the time to complete this survey!

Name: _____

Industry Type/Agency: _____

What OCC Program do you advise for : _____

Date Completed: _____

Please Return To: Letyna A. Roberts
Oakland Community College, Office of State and Federal Programs, AH Campus

Due Date: _____

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY

**OAKLAND COMMUNITY COLLEGE
ADVISORY COMMITTEE/INDUSTRY PERCEPTIONS OF OCCUPATIONAL PROGRAMS
(Program Review of Occupational Evaluation - PROE)**

Thank you for taking the time to complete the following survey as it will help to improve upon the success of the occupational programs at Oakland Community College. **Please circle the letter that corresponds to your selection.**
Please circle only one letter.

1. The program at Oakland Community College is meeting the expectations of the advisory committee.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

2. The courses offered are preparing the students for the workforce.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

3. The advisory committee is informed about the program.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

4. The advisory committee has substantial input into decision-making within the program.
 - a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree

DATA COLLECTION

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY (*continued*)

**OAKLAND COMMUNITY COLLEGE
ADVISORY COMMITTEE/INDUSTRY PERCEPTIONS OF OCCUPATIONAL PROGRAMS
(Program Review of Occupational Evaluation - PROE)**

5. The advisory committee is satisfied with the direction of the program.
- a. Strongly Agree
 - b. Agree
 - c. Neutral
 - d. Disagree
 - e. Strongly Disagree
6. If there is one thing the committee would like to change about the program, explain what it is and how it would enhance the program.

Thank you for taking the time to complete this survey!

Name: _____

Industry Type/Agency: _____

What OCC Program do you advise for : _____

Date Completed: _____

Please Return To: Letyna A. Roberts
Oakland Community College, Office of State and Federal Programs, AH Campus

Due Date: _____

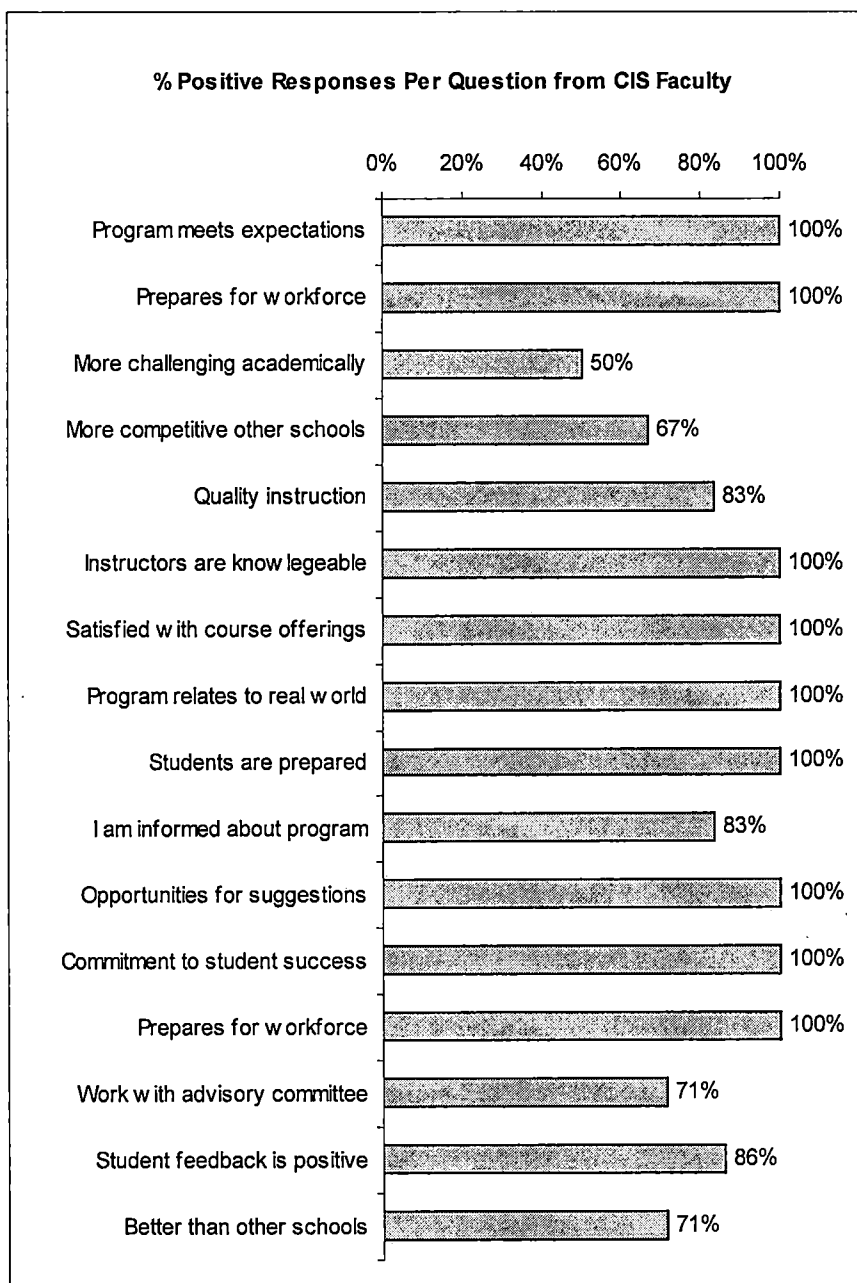
DATA ANALYSIS

E. INPUT FROM INTERNAL & EXTERNAL COMMUNITY

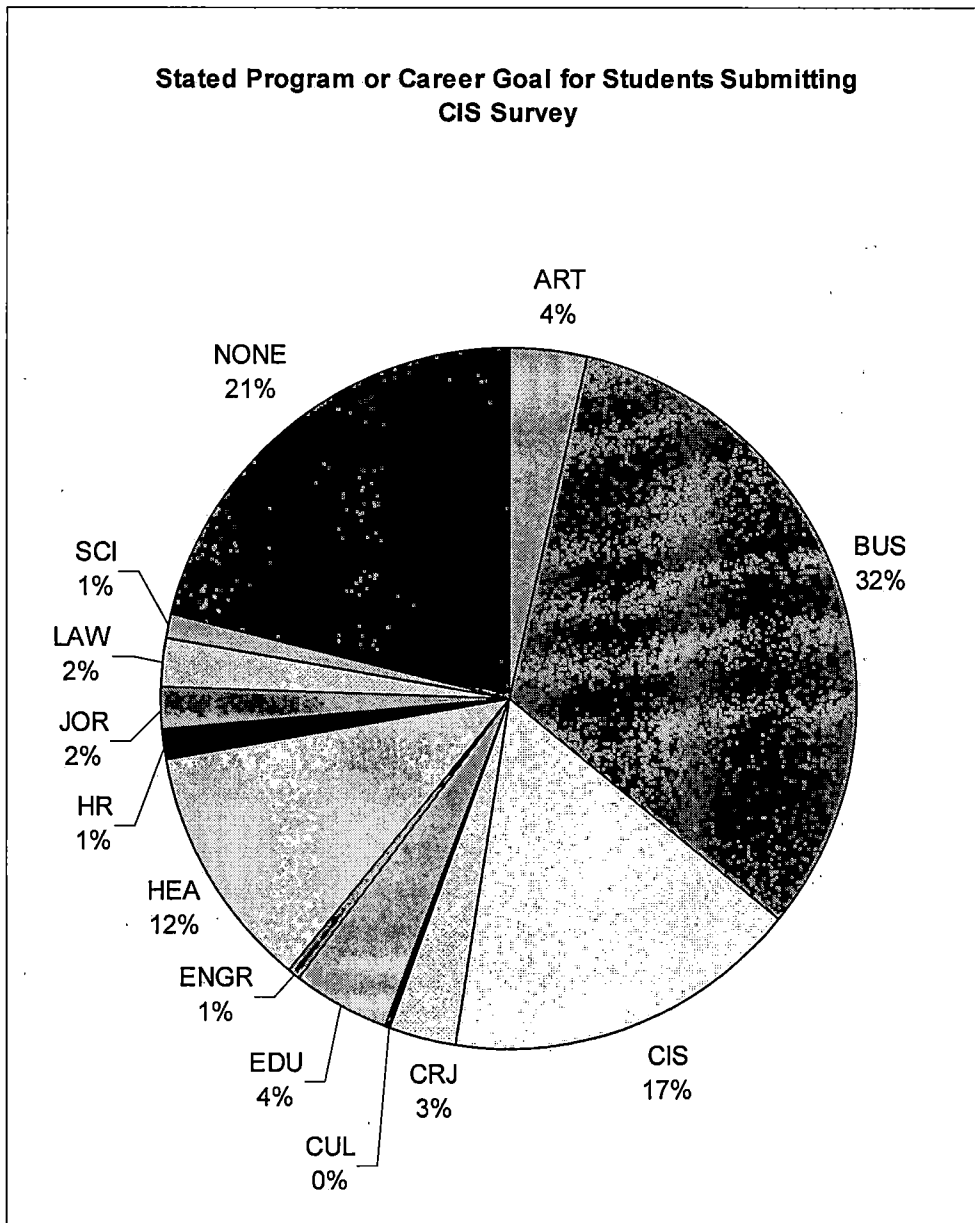
Coordinator: After reviewing the Data Collection forms on all the courses in the Program, along with the collated data summary, please analyze and summarize these findings.

Important Note: Survey responses of "Agree" or "Strongly agree" were recorded as "positive" responses in the charts.

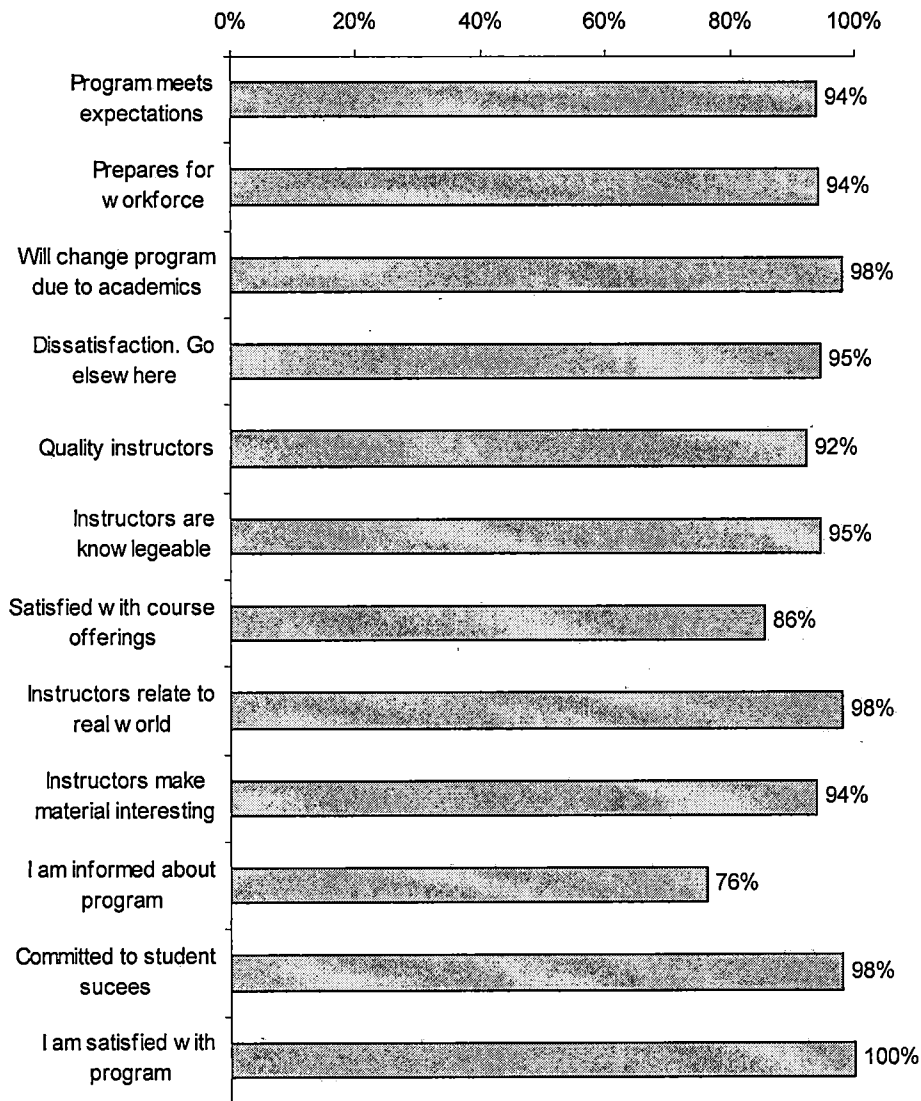
Faculty Perceptions of Occupational Programs Analysis
(10 faculty surveys from 4 campuses)

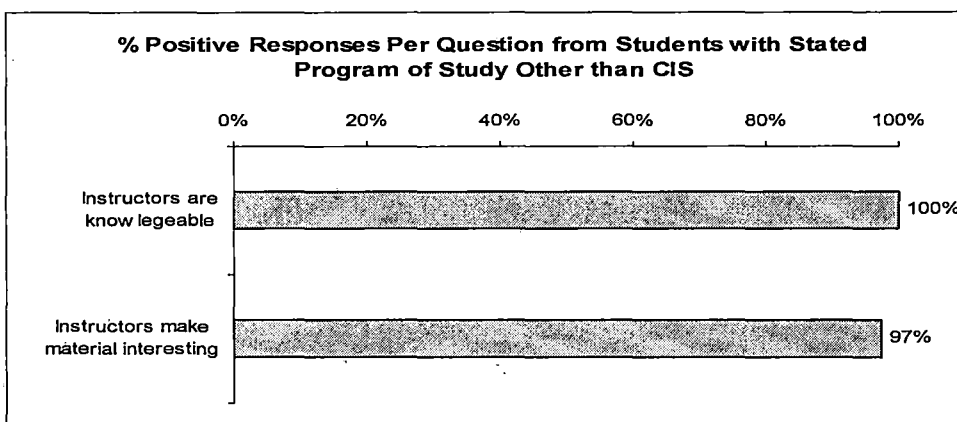
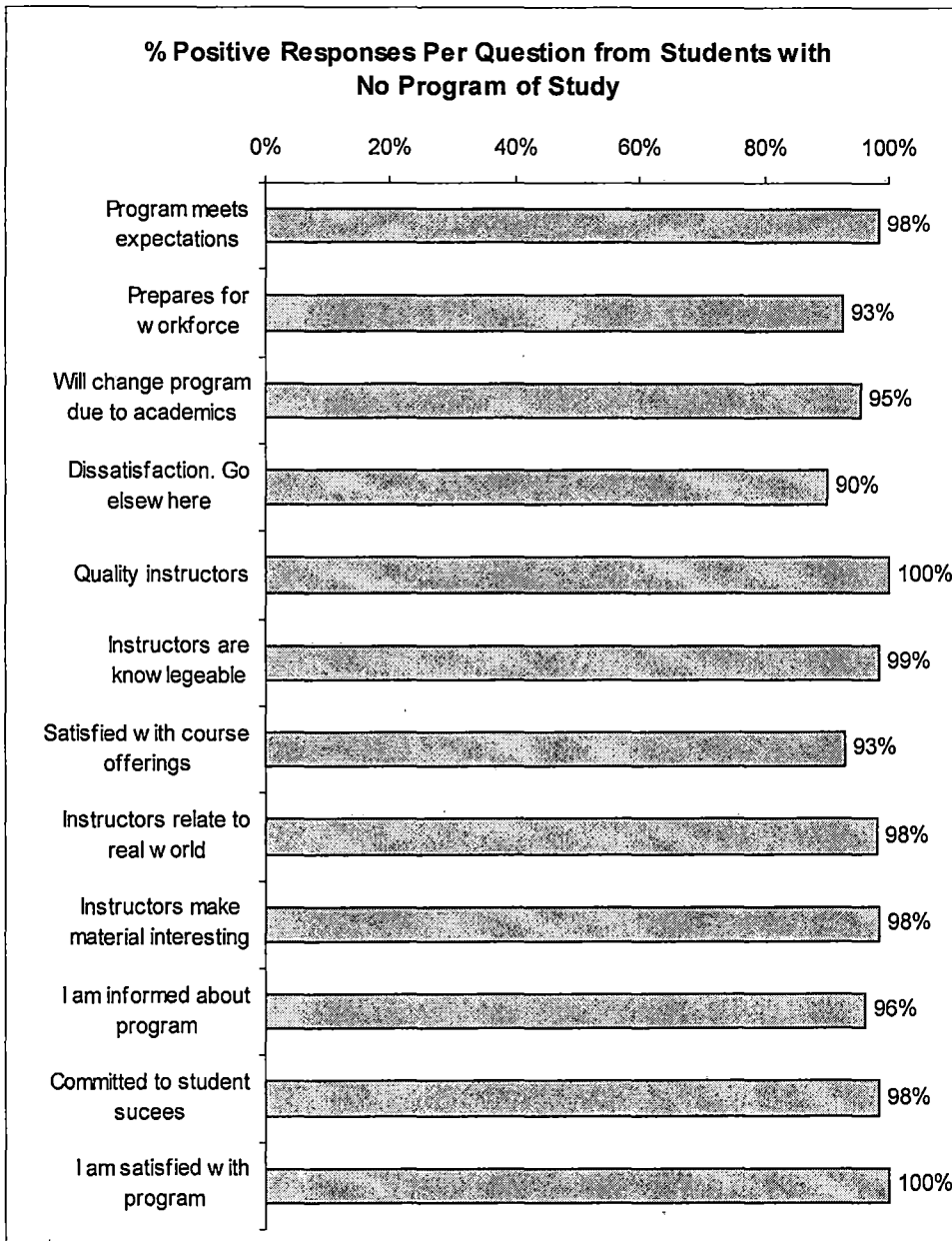


Student Perception of Occupational Programs Analysis
(347 student surveys from all levels of CIS courses and multiple campuses)



% Positive Responses Per Question from CIS Students





Advisory Committee/Industry Perceptions of Occupational Programs Analysis

(In progress. First meeting with industry committee scheduled for April 20, 2007.)

**INPUT FROM THE INTERNAL AND EXTERNAL COMMUNITY
REVIEW SUMMARY**

Faculty Input

Responses from faculty were mixed (i.e., 50 or 60% positive) on the topics of whether or not our programs needed to be more challenging and more competitive with other schools. Further analysis of the data revealed that the majority of non-positive responses on these two topics came from adjunct instructors. Also, results from two other questions on being informed and quality of instruction indicate room for improvement. However, the majority of negative responses on these questions were also from adjunct instructors. Better activities and communication for integration between adjunct and full-time faculty would be helpful.

The last three questions on the faculty survey required "Yes" or "No" responses and were tied to the statement: "I am satisfied with the direction of this program because." Once again, the majority of negative responses came from adjunct instructors. This is consistent with the feeling that adjunct instructors need more information about what is going on in the department and how decisions were made on curriculum change.

All other questions on the faculty survey received perfect scores of 100% positive. Obviously, this indicates strong faculty confidence.

Student Input

This collection of survey responses represented an excellent cross-section of students from all different levels of CIS classes (i.e., 1000 and 2000-level courses) and from multiple OCC campuses.

Since the inception of the software engineering degree program (fall 2004), only four students have been awarded the degree. Many staff and non-CIS faculty may view this as a negative program attribute but those of us in the CIS discipline understand that there are other attributes much more important in measuring the success of a CIS program. In order to gain a better understanding of CIS program analysis, one must look at the entire picture and not just one subcategory or one job title such as "programmer." Therefore, it is critical to this curriculum analysis that we look at survey responses from all types of students taking CIS courses – not just those students who have the goal of obtaining a particular CIS associates degree or certificate.

As illustrated in the pie chart shown above, **only 17% of the 347 students surveyed indicated that CIS was their program of study or career goal.** Of this 17%, most if not all of the students understand that in today's job market a full four-year degree is a minimum requirement for consideration of IT-related positions. As defined in the U.S. BLS data (shown in the labor analysis section below), there are excellent opportunities for IT employment with high-paying salaries in several specialties but **they all require a bachelors degree** at a minimum.

The largest student group in the pie chart is "business" and they deserve much more attention than we have given them in the past. We need to take a fresh look at how we could better serve their needs and integrate more appropriate IT training into their curriculum. When the new curriculum was initiated in fall 2004, I defined a new category of classes in our curriculum implementation plan titled "Interdisciplinary Support Courses." At the time, there was not much support for this idea but the goal was to create courses that were tailored to the needs of students in other disciplines. This is a very important area that CIS needs to re-focus on and work together with other disciplines to create more relevant course offerings. **Of the 347 students who took the survey, 62% of students are in OCC programs other than CIS.** In almost every case, students in non-CIS programs are required to take only one CIS class that covers general PC productivity software (i.e., word processing, spreadsheets, presentations, etc.).

In today's global workplace with increasing competition, this is clearly not enough to help students succeed. There is much more technology available beyond the basic desktop tools that workers are learning to master. Students who move beyond OCC to higher-level education are routinely expected to already have advanced skills with information and computer technologies. If we don't help them develop these skills before they leave OCC, they may be at serious risk of falling behind the competition for tomorrow's jobs.

Another item that stands out in the pie chart is the fact that the third largest category (None at 21%) represents students who do not have a stated program of study or career goal. Through ongoing interaction with these students in the classroom, many of us have learned that most are working professionals with four-year college degrees who are taking CIS courses simply to add skills using particular types of technologies. Better input from and closer ties with industry will help us better anticipate the needs of this group of students. Marketing and advertising will also play an important role.

The bar charts showing results from student surveys indicate that CIS is doing a superior job in almost all categories. The percentage of positive responses (agree or strongly agree) averaged 95% over all questions. Due to the fact that most questions were relevant to an OCC program, many responses from students in non-CIS programs were not used in the last bar chart. For example, we may assume that answers from art students would be targeted toward the art program. Therefore, the only two questions that could be considered relevant to CIS are:

- Did the instructor seem knowledgeable about the subject matter? and
- Did the instructor make the material seem interesting?

On these two questions, CIS instructors scored exceptionally high marks of 100% and 97% positive responses.

Amidst all the excellent response scores, only the question of whether or not the student was informed about the program produced a lower score of 76%. However, this was only lower for CIS program students. The new web site that we recently created along with initiatives to improve external marketing should help improve this service to students.

From all the student data, it appears that our quality of instruction and delivery is excellent but we could improve our marketing, scheduling, and partnerships with industry and other OCC disciplines.

DATA COLLECTION

F. COMPARABLE COURSES/PROGRAMS AND TRENDS

Coordinator: Answer the following questions.

- List three institutions to which the courses in your Program transfer, and list the specific courses for each institution. (Consult with the Counseling Department)

A) Walsh College

BACHELOR OF SCIENCE IN BUSINESS INFORMATION TECHNOLOGY (BSBIT)

* A Fall or Spring start is highly recommended for students pursuing the BSBIT program.

Additional Admission Requirements:

- Programming Course: CS 2151 or CS 2252 or CS 2656 or CS 2757
- Database Course: CIS 1200 ■ Networking Course: CIS 1300
- Systems Life Cycle: CIS 2111

BSBIT PROFESSIONAL CORE			
Required of all students wishing to earn a BSBIT degree at Walsh College.			
OCC	WALSH	TITLE	HOURS
ACC 1810	ACC 201	Principles of Accounting I	3
ACC 1820	ACC 202	Principles of Accounting II	3
MATH 1500*	BIT 201	Analytical Methods for Information Technology	3
	BIT 316	BIT Compliance	3
	BIT 416/516	Business Process and Systems Engineering	3
	BIT 476	Business and Technology Strategy	3
ENG 2200*	COM 210	Principles of Business Communications	3
	COM 320	Business Communications Methods	3
	BIT 342	Technical Communications	3
ECO 2610*	ECN 201	Principles of Economics I	3
ECO 2620*	ECN 202	Principles of Economics II	3
BUS 2530	MGT 201	Principles of Management	3
MAT 1580*	QM 202	Statistical Methods for Business	3
	QM 301	Statistical Inference for Management Decisions	3
Remaining Courses		Remaining Credits	

* Indicates liberal arts course work as determined by Walsh College.

BSBIT PROGRAM CORE			
OCC	WALSH	TITLE	HOURS
	BIT 301	Business Information Technology Theory and Practice	3
	BIT 331	Business Information Technology Architecture	3
	BIT 337	Software Engineering I	3
	BIT 339	Software Engineering II	3
	BIT 347	Database Administration	3
	BIT 411	Internet/Web/E-commerce	3
	BIT 446/546	Information Systems Security	3
Remaining Courses		Remaining Credits	

PROGRAM ELECTIVES - Choose One of the Following Specializations:			
OCC	WALSH	TITLE	HOURS
Advanced Networking			
	BIT 381	Scalable Internetworks	3
	BIT 382	Multi-layer Switched Networks	3
	BIT 383	WAN Remote Access and Troubleshooting	3
Audit			
	ACC 301	Intermediate Accounting I	3
	ACC 302	Intermediate Accounting II	3
	ACC 303	Financial Accounting Concepts	3
	BIT 425	IT Auditing	3
Information Assurance			
	BIT 471	Building an Information Protection Program	3
	BIT 472	Information Security Safeguards	3
CIS 2839	BIT 473	Information Systems Threat Assessment	3
Remaining Courses		Remaining Credits	

Students may elect to take up to six semester credit hours (two courses) at the graduate level (varies by degree) in preparation for pursuing a graduate degree at Walsh College. Please refer to the Online catalog for allowable coursework.

B) Wayne State University

OCC		Wayne State U.	
CIS1050	PERSON COMPUT APPL	ISM2630	
CIS1050	Personal Comp Application	ISM2XXX	200309
CIS1100	FUND OF INFO SYSTEMS.	CSC1000	
CIS1300	Networking Concepts.	CSC3XXX	200409
CIS1400	Introduction to Web Systems.	CSC2XXX	200409
CIS1500	Intro to Software Eng. (Java).	CSC1100	200309
CIS2111	System Analysis & Design(UML)	CSC2XXX	
CIS2151	Object-Oriented Prog.	CSC2XXX	200409
CIS2252	Object-Orient Prog C++.	CSC2000	200409
CIS2353	Data Structures.	CSC2110	200409
CIS2454	Web System Devel (JSP).	CSC2XXX	200409
CIS2515	Database Design and Mgmt.	CSC3XXX	200409
CIS2555	Web System Devel (ASP).	CSC2XXX	200409
CIS2616	Database App Design (XML,SQL).	CSC2XXX	200409
CIS2656	Visual Basic Programming.	CSC1XXX	200409
CIS2717	Expert and Knowledge Based.	CSC3XXX	200409
CIS2757	C# Programming.	CSC2XXX	200409
CIS2818	Wireless and Mobile Systems.	CSC2XXX	200409
CIS2838	SYSTEM SECURITY.	CSC1XXX	
CIS2839	Internet Security.	CSC3XXX	200409
CIS2858	Advanced Web Programming.	CSC3XXX	200409
CIS2859	Graphics and Game Programming.	CSC3XXX	200409

C) Oakland University

Subject	OCC Number	Title	Credits	Transfers?	OU Equivalency	GenEd
CIS	1050	Personal Computer Productivity Tools	4	Yes	None	(must be completed prior to FA 2005)
CIS	1100	Fundamentals of Information Systems	4	No		<i>none</i>
CIS	1200	Intro. to Database Systems	4	No		<i>none</i>
CIS	1400	Intro. to Web Systems	4	Yes	None	<i>none</i>
CIS	1500	Intro. to Software Engineering (JAVA)	4	Yes	CIT/CSE 230 Object-Oriented Computing I	<i>none</i>
CIS	2111	Systems Analysis and Design	4	Yes	None	<i>none</i>
CIS	2151	Object Oriented Programming (JAVA)	4	Yes	CIT/CSE 230 Object-Oriented Computing I	<i>none</i>
CIS	2212	Information Technology Project Mgmt	4	Yes	None	<i>none</i>
CIS	2250	COBOL Software Development	4	No		<i>none</i>
CIS	2252	Object - Orientated Programming (C++)	4	Yes		<i>none</i>
CIS	2313	E - Business and E-Commerce	4	Yes	None	<i>none</i>
CIS	2353	Data Structures	4	Yes	CSE 231 Object - Oriented Computing II	<i>none</i>
CIS	2454	Web Systems Development (JSP)	4	Yes	None	<i>none</i>
CIS	2515	Database Design & Management	4	Yes	None	<i>none</i>
CIS	2555	Web Systems Development (ASP)	4	Yes	CIT/CSE 251 Web Programming	<i>none</i>
CIS	2616	Database Application Design (XML , SQL)	4	Yes	None	<i>none</i>
CIS	2656	Visual Basic Programming	4	Yes	EGR 141 Comp. Problem Solving in Engr. and Comp. Sci.	<i>none</i>
CIS	2717	Expert and Knowledge - Based Systems	4	Yes	None	<i>none</i>
CIS	2757	C# Programming	4	Yes		<i>none</i>
CIS	2781	HTML Programming	3	Yes	None	<i>none</i>
CIS	2818	Wireless & Mobile Systems	4	Yes	None	<i>none</i>
CIS	2838	System Security	4	Yes	None	<i>none</i>
CIS	2839	Internet Security	4	Yes	None	<i>none</i>
CIS	2858	Integration and Advanced Web Systems	4	Yes	None	<i>none</i>
CIS	2859	Graphics & Game Programming	4	Yes	None	<i>none</i>

2. List the institutions with which articulation agreements exist that include the courses in your Program. (Consult with the Counseling Department)
 - A) Walsh College – Information Assurance Program and BSBIT degree.
 - B) Lawrence Technological University – BS in Business Info. Tech., MS in Info Systems, and MS in Info. Assurance.
3. Provide information regarding labor market trends in your field. (Consult with the Office of Assessment & Effectiveness)

Data Sources – U.S. BLS (projections thru 2014)

Michigan Department of Labor and Economic Growth (projections thru 2012)

(Complete U.S. detail data available in file “US_BLS_Computer_Occupation_Data.zip”)

Rank - All Careers	Career Category	% Change in # of Job Openings (SE MI.)	Median Salary (SE MI.)	% Change in # of Job Openings (U.S.)	Median Salary (U.S.)
6	Software Engineers (Applications)	+37	\$76.0K	+48	\$77.0K
12	Software Engineers (System Software)	+32	\$72.5K	+43	\$82.0K
23	Computer Programmers	+8	\$67.0K	+2	\$63.0K
Other Computer Job Categories					
9	Systems Analysts	+32	\$70.0K	+31	\$68.3K
14	Network & Comm. Analysts	+46	\$51.1K	+55	\$61.8K
17	Network & System Administration	+30	\$58.4K	+38	\$59.9K
19	Computer & Info. Systems Managers	+28	\$100.1K	+26	\$96.5K
?	Database Administration	+35	\$63.1K	+38	\$63.3K
Other non-Computer Job Categories (for Comparison)					
1	Registered Nurses	+19	\$57.8K	+29	\$54.7K
2	Nursing Aids	+15	\$24.2K	+22	\$21.4K
14	Dental Hygiene	+25	\$59.4K	+43	\$60.9K
17	Emergency Medical Technicians	+13	\$32.3K	+27	\$26.1K
?	Fire Fighters	+15	\$46.6K	+24	\$39.1K
?	Police Officers	+17	\$50.7K	+16	\$46.3K

4. Identify changes in job performance and employer expectations that have occurred within your industry in the past 5 years. (Consult with advisory committees, professional organizations)

(In progress. First meeting with industry committee scheduled for April 20, 2007.)

DATA ANALYSIS

G. COMPARABLE COURSES/PROGRAMS AND TRENDS

Coordinator: Please use the data from the Comparable Courses/Programs and Trends Data Collection form to answer the following questions:

1. Discuss how your program serves transferring students.

The current transfer opportunities for software engineering students is good but could be made much better through increased communication with four-year institutions and students. OCC counseling and transfer guidelines on college web sites certainly helps but we can give more detail into the transferability of specific technical content. As illustrated in the labor data above, there are excellent job opportunities for software engineers but a four-year degree is a minimum requirement.

2. Discuss the program's current articulation agreements. If your program does not transfer, discuss how the courses and/or program serve our students.

The articulation agreements shown above provide only a couple basic choices for CIS students. This list could certainly be expanded to provide more choices. There is also a need to make adjustments in the agreement with Walsh. However, as indicated in the student survey pie chart above, only 17% of all the students surveyed were interested in pursuing a CIS career and possibly transferring to a four-year institution.

3. Discuss employment opportunities for students in both the current and future job market.

The labor data from the U.S. BLS and from the State of Michigan clearly show excellent opportunities for CIS professionals through 2012 and 2014. The most important factor is to understand the distinction between programming and software engineering. Programming is the job category that has taken the bulk of off-shoring and is only expected to grow at 2 to 8%. Programming is also the type of work that could be performed satisfactorily with only two years of college training (e.g., OCC associate degree or certificate). In sharp contrast, software engineering requires much more formal training with additional emphasis on methods and standards. A programmer could be compared to a carpenter who works on the frame of a building whereas a software engineer could be compared to an architect, who studies the big picture, creates the building concept and design, and oversees the integration of construction work. Therefore, the CIS software engineering program at OCC must be used as a stepping stone to additional training and formal education.

4. Discuss the changes that will be made in your program in response to current/future employer expectations and market trends.

(In progress. First meeting with industry committee scheduled for April 20, 2007.)

COMPARABLE COURSES/PROGRAMS AND TRANSFER REVIEW SUMMARY:

There have been only a hand-full of students who have graduated with an associates degree or certificate in software engineering. The data clearly shows that this is not because of poor quality in the program or because of lack of job opportunities. The quality of the program is excellent and the projections of employment are also excellent. The requirements for these opportunities now includes a higher level of education and training that will keep the student above the level of work being assigned to low-wage workers. Therefore, CIS needs to place a strong focus on helping each software engineering student transition to higher-level educational institutions.

DATA ANALYSIS

H. OUTCOMES ASSESSMENT

Coordinator: Complete this form after reviewing your most recent Program Assessment Plan. Obtain the most recent copy of your Program Assessment Plan from the Office of Assessment & Effectiveness. Please attach it your review.

1. How have you used the findings from your Program Assessment to improve your program?
2. What revisions to your Program Assessment Plan would you suggest?
3. Discuss the SAGE findings that apply to the instruction in your Program.
Obtain these findings from the Office of Assessment & Effectiveness.

OUTCOMES ASSESSMENT REVIEW SUMMARY:

CIS assessment is still in progress and is not at a stage that allows analysis of results. However, the following description of current work and observations were made available in the curriculum review documentation from the OCC Office of Assessment & Effectiveness (OAE).

CIS Software Engineering Program Assessment Summary

Completed documentation:

- Statement of purpose
- Catalog description
- Two learning outcomes with benchmarks and assessment methods

OAE observations and concerns

- Need a third learning outcome with benchmarks and assessment methods
- Need additional timeline information

Faculty Sign-Off Form*

For Curriculum Review of Program:

I approve the Curriculum Review Report as written by the Faculty Program Review Coordinator.

Yes _____ No _____

Comments: (Attach additional sheets if necessary)

Name (printed) _____

Signature _____

Date _____

* This form is to be copied by and distributed to all faculty within the Program to ensure awareness and participation.