



Skyline College

Surgical Technology Program

Program Review

Executive Summary

Short Summary of Findings

The Program has made many positive changes over the last six years. Modifications have been made to the curriculum and scheduling of two classes. The Program was lengthened to three semesters. A new Clinical Instructor was added who improved lesson plans for the labs. Student Learning Outcomes were created for all four courses. The Program moved into new facilities with greatly improved teaching tools and lab equipment.

Three Strengths of the Program

- The program has an Operating Room and Sterile Processing room for improved labs and a state-of-the-art classroom.
- **The Clinical Instructor provides instructional and lab support for the students and the Director.**
- **The curriculum is thorough and prepares the students well for employment.**

Three Suggestions for Improvement

- The position of the Clinical Instructor should be extended to full-time to meet the needs of the students of the Program and the instructors of other Allied Health programs.
- The Program needs to purchase or otherwise obtain more supplies and instruments for labs.
- The Allied Health Learning Resource Center needs to be developed to meet the needs of the Surgical Technology students for computer-based learning tools.

Full-Time Faculty Signatures

Alice Erskine, RN, MSN, CNOR

Submitted on: March 31, 2009

SKYLINE COLLEGE PROGRAM REVIEW SELF STUDY

PART A: Mission Effectiveness

Overview

1. *State the goals/focus of this program and how the program contributes to the mission and priorities of the College and District.*

The focus of this program is to prepare students to be able to collaborate with members of the Surgical Team in providing care to surgical patients that meets professional standards with regards to the selection and application of appropriate technology, and meeting the patient's emotional and cultural needs. In addition, the program promotes and evaluates for student participation in national credentialing, continuing education, activities within the healthcare community. This is in keeping with the college's Mission of "preparing students to be culturally sensitive members of the community, critical thinkers, and ...socially responsible lifelong learners."

2. *Discuss how this program coordinates, impacts, and/or interacts with other programs in the College.*

The program coordinates with the Central Service Technicians Program with regards to the use of the laboratory and classroom in meeting our common needs for equipment and supplies and the learning opportunities this affords both programs. Further the students of both programs benefit from the instruction by the other program's instructor which serves to establish a collegial atmosphere among the two disciplines. The program facilities are also shared by the Biotechnology Program and the Perioperative Nurse Program of the College of San Mateo.

3. *Explain how this program meets the needs of our diverse community.*

Our students have come from as far away as Mt. Shasta to the north, Stockton to the east, and Los Gatos to the south. Efforts have been made to lessen their commute time and increase their chances of success. The Program Director welcomes students for whom English is a second language and has provided them with information about tutoring and other services to help them succeed. In a class on Cultural Diversity, all students are encouraged to share their ethnic and cultural heritage and to respect others.

4. *If the program has completed a previous self-study, evaluate the progress made toward previous goals.*

Previous goals included increasing the quantity and quality of supplies and equipment to provide the students with a more realistic setting in which to learn. Much progress has been made in this area. Now, with several major additions, we can simulate very closely a real working operating room and sterile processing room. A Clinical Instructor was hired who has collaborated with the Program Director in creating simulation training.

PART B: Student Learning Programs and Services

Overview

1. If the program utilizes advisory boards and/or professional organizations, describe their roles.

This Program's Advisory Board is comprised of current and former students, a Medical Director who is a surgeon, a person from the community, and a Perioperative Registered Nurse. It meets to discuss goals of the program and ways to meet the needs of the student, the employer, and other programs. The Program is also accredited by the Commission on Accreditation of Allied Health Education Programs under the continuous purview of the Accreditation Review Committee for Surgical Technology (ARC-ST). A report regarding compliance with accreditation guidelines is required by ARC-ST annually.

Curriculum

1. Describe how the courses offered in the program meet the needs of the discipline(s) and the students. (This may be answered through descriptive narrative evaluation or quantitative research).

SURG 440 provides students with a scientific foundation that prepares them to comprehend the disease process of their patients, the workings of surgical technology, and the need for an application of particular supplies, medications and surgical interventions.

SURG 441 gives the students the theoretical and practical knowledge of the wide variety of supplies, equipment, medications and processes used in surgery such that they can assist in the appropriate selection and application.

With SURG 442, the students further develop their understanding of surgical anatomy and pathophysiology and the applications of surgical technology such that they can anticipate the needs of the surgeon and the patient undergoing a specialized procedure.

SURG 443 is where the student applies the knowledge of the other courses in the clinical setting, learning while doing. The program instructors consult with the preceptors to ensure the students are employable upon completion of the Program.

2. State how the program has remained current in the discipline(s).

Both instructors maintain their expertise with continuing education and participation in their professional associations. Both network regularly with practitioners to update the lab with the current technology. The Program Director keeps current with regards to changes in regulatory requirements by attending quarterly meetings with the Bay Area Perioperative Educators, a group of Nurse Educators from operating rooms of several counties.

3. If the student population has changed, state how the program is addressing these changes.

More and more of the applicants are also applying to Nursing schools and other allied health programs. There is a trend for these candidates to drop from the Surgical Technology Program once they have been accepted elsewhere. The admissions procedure was changed so that 20 students are accepted and an additional 5 students are placed on a waiting list. These five are required to attend SURG 440, the course, so that when a student drops out, that place can be filled with a prepared student.

4. All courses in this program should be reviewed for currency and modified every six years. If this has not occurred, please list the courses and explain.

SURG 440 was last revised in 2007. SURG 441 was revised in 2008. SURG 442 and 443 have been revised for this Review.

5. *If external accreditation or certification is required, please state the certifying agency and status of the program.*

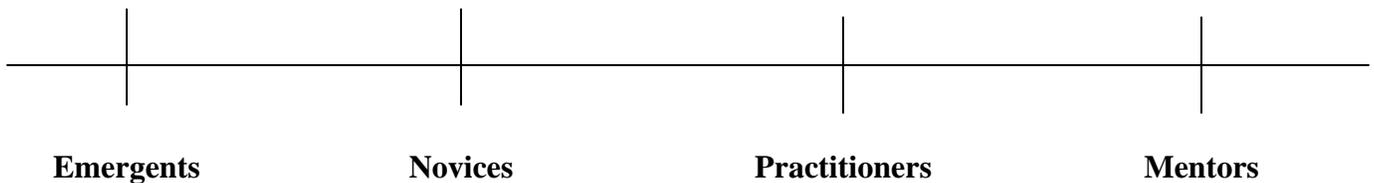
The Program is current with its accreditation by the Commission on Accreditation of Allied Health Education Programs.

Student Learning Outcomes & Assessment

1. *Where on the continuum do you believe your department is on the SLOAC Initiative?*

Emergents	Novices	Practitioners	Mentors
<ul style="list-style-type: none"> • Learning and discovering • Gathering information • Attending workshops 	<ul style="list-style-type: none"> • Beginning a dialogue • Drafting SLOs • Drafting assessment plans • Taking inventory of assessments • Creating instruments for assessment 	<ul style="list-style-type: none"> • Engaging in widespread dialogue • Implementing assessment plans • Refining SLOs • Reviewing outcome data and discussing implications 	<ul style="list-style-type: none"> • Facilitating discussions and generating new dialogue • Conducting workshops • Lending assistance

Mark an X on the continuum and briefly comment.



COMMENT: We have drafted Student Learning Outcomes and assessment plans. We have yet to implement the plans and analyze the results.

2. *Highlight any major findings and resulting course or program modifications.*

COMMENT: See above.

3. *What additional resources are needed to implement the plan?*

COMMENT: None have been identified

PART C: Resources

Faculty and Staff

1. *List major development activities completed by faculty and staff in this program in the last six years and state what development is needed or proposed by faculty in this program.*

Three years ago, a part-time Clinical Instructor was hired at the urging of the Program Director to assist in labs and to maintain the supplies and equipment. His duties also include clinical site visits. This has given the Director more time for Program administration, revising and developing new curricula, updating lesson plans, and learning to use more current teaching technology.

In 2007, the Program Director received approval from the Curriculum Committee to extend the length of the program to one year. SURG 440 is now offered in the summer as a prerequisite to SURG 441.

This allows students time to concentrate solely on the complex scientific concepts of Anatomy, Physiology, Microbiology, Pharmacology, and Physics. The lab time in SURG 441 was extended and more simulated practice was included. As a consequence, the students were better prepared for Clinical Practice in the spring semester.

Last fall, the faculty moved into a suite of new classrooms which feature Smart technology, a Sterile Processing room with functional equipment, a Substerile room and storage area, and a realistic Mock Operating Room. In addition, the Program Director collaborated with staff of another community college on implementing an IDRC grant. The result added to the instrument and equipment inventory and improved teaching materials.

2. *Describe the orientation process for new faculty and staff (include student workers such as tutors and aides).*

Only one new faculty member was added to the Program. The Clinical Instructor was given a job description, and a tour and a directory of the facilities. In several short-one-on-one sessions, he was oriented to the curriculum, lesson plans, and documentation.

3. *If recruitment of new and/or diverse faculty is needed, suggest recruitment techniques.*

None needed.

Facilities, Equipment, Materials and Maintenance

1. *Discuss the effectiveness of the facilities, equipment, equipment maintenance, and materials for the program to meet its goals and focus. Include if they impact success and if they are accessible to all students.*

The new facilities have increased the effectiveness with which the instructor can lecture. All students can now see the screen and white board which enhances their learning tremendously. The document scanner allows the instructor to demonstrate fine hand movements to the entire class at once. This is much more effective than going from tablet to table teaching small groups. The Operating Room and the Sterile Processing Room with their realistic equipment allow the students to become comfortable with technology before they enter the hospitals thereby shortening their adjustment to the real world setting. The staffs of the hospitals where they are training have noticed a significant improvement in the skill levels of our students. This sets the students up to achieve success early on and boosts confidence.

On the down side: The amount of disposable supplies available often requires the students to reuse them until they are no longer usable. Surgical drapes, gowns and gloves are often refolded and used again with some difficulty. This affects the students' ability to learn how to properly use these items. The sterile processing equipment and surgical technology were recently purchased with a grant. They need to be kept clean and in good working order to maximize that grant. As the Central Service Technician Program, Biotechnology Program, Respiratory Therapy Program, Perioperative Nurse Program and other programs increase their use of the lab and its supplies and equipment, we need to ensure they will be maintained properly. The primary duties of the part-time Clinical Instructor are teaching and clinical site visits. This leaves him very little time to maintain the lab and respond to the needs of these programs.

2. *List projected needs.*

As far as materiel is concerned, the Program needs more specialty instruments to complete sets that are commonly found in the hospitals. The par levels of disposable supplies need to be increased.

The Program needs to collaborate with the other Allied Health programs to select and install appropriate computer-based learning modules in the Allied Health Learning Resource Center. This would allow

the students to use their free time to learn about key concepts of Health Sciences, Surgical Technology and techniques, and to supplement the lectures.

3. *Describe the use of technology in the program and discuss if technology is current and comparable to other college and business or industry.*

The new classroom and Learning Resource Center has state-of-the art teaching technology. All lectures have been converted to PowerPoint. The Director is currently working to replace videos with DVDs. The Document Scanner is being used to great effect for hard-to-duplicate documents as well as for projecting images of small items to the class.

4. *If appropriate, describe the support the program receives from industry. If the support is not adequate, what is necessary to improve that support?*

Many hospitals and vendors have contributed supplies and equipment to the Program and continue to do so. These donations supplement the limited amount the Program is able to purchase with the current budget. Since the hiring of the Clinical Instructor, the Director now has the time to pursue offers from vendors for support in the form of materiel and instruction.

Budget Request

1. *What resources (staff, facilities, equipment and/or supplies) will be needed in the next six years?*

The Program needs the services of a full-time Clinical Instructor/ Lab Assistant in order to keep the new facilities in good working order and ensure the students always have adequate supplies. To keep current with Industry standards, the Program needs to purchase a newer model anesthesia machine and more specialty instruments.

2. *If appropriate, discuss methods the program could share resources with other programs in the College and District.*

The Program already shares resources such as the Sterile Processing equipment and supplies with the Central Services Program. The Director is working with the Biotechnology Program, the Respiratory Therapy Program, and the CSM Perioperative Nurse Program to schedule the use of the labs and materiel. It is hoped that these Programs will contribute more to the budget for supplies and/or instruments. Perhaps the directors of those programs could join the Surgical Technology Director in writing a grant to fund many of our common supply needs.

The classrooms, labs, and the Allied Health Resource Center could also be used by the Anatomy, Physiology, Respiratory Therapy, Nursing, or Emergency Medical Technician Programs for lectures, demonstrations, simulations, and computer-based learning. The facilities could also be used by hospitals, healthcare professional associations, and healthcare product vendors for seminars and workshops. Perhaps the college could charge a small fee to outside users on non-instructional days.

PART D: Leadership and Governance

1. *What leadership roles do the faculty and staff of your program hold in the college?*

The Director sits on the Health & Safety Committee. Recently, she initiated an investigation into the new Parking Lot 7A and its accessibility to disabled staff. The Director has also volunteered to serve on the State Chancellor's Disaster Task Force seeking to upgrade the preparedness of state community colleges.

2. *How do the faculty and staff in your program participate in the governance processes of the college/district?*

Both stay current with the news from the Academic Senate and vote. But, both have schedule conflicts at the time of the weekly Senate meeting.

3. *How do the faculty and staff in your program exercise initiative/leadership in improving practices and services related to the program?*

The Director revised the course outlines for SURG 440 and 441 in response to perceived need of the students for more time to acquire the complex knowledge needed to be successful in this program. In response to the needs of the hospitals, the Director changed the health screening process for the new candidates to ensure they were prepared for admission to the clinical training setting. The Director found clinics where the students could obtain their health screening at a lower cost.

The Clinical Instructor found Industry partners who are willing to provide learning opportunities in simulation and cadaver labs at no cost to the college. He redesigned the clinical labs to include more mock surgeries prior to the students entering the Clinical externship.

PART E: Action Plan

1. *Describe the program's plan for addressing areas of improvement.*

A) The Clinical Instructor is currently consulting with the instructors of the Central Service Technician Program, the Biotechnology Program, and the Manager of the Biology Stockroom to set par levels for the instructional supplies for the labs. These levels will be reviewed from time-to-time to ensure that the types and amounts of supplies are adequate for all users of these labs.

B) The Clinical Instructor and Director are surveying the other Allied Health instructors and the Biology Stockroom Manager to identify their needs for a lab assistant in the new Sterile Processing lab.

C) The Director and Clinical Instructor are revising the latter's job description to reflect the added duties of maintaining the new Operating Room, Substerile room, and Sterile Processing room.

D) The Director is seeking to create accounts with vendors who can provide necessary supplies at a lower cost than current distributors charge. This will help stretch budget dollars.

E) A long-term goal is to develop an Anesthesia Technician Program to meet the identified needs of the hospitals for well-trained employees who can assist the anesthesia care providers and maintain their expensive equipment. The Director has already begun to investigate whether an anesthesia machine company might be willing to loan a newer model to the college to provide the latest technology with which the Anesthesia Technology students can prepare for clinical externships. This would also provide the surgical technology and perioperative nursing students with a more realistic lab setting.

F) The Director has begun consultations with directors of other Allied Health Programs and the Physiology department regarding the selection of computer-based instruction that will be loaded onto the computers in the Allied Health Learning Resource Center.

G) The Director will proceed with the Assessment and Analysis phases of the Student Learning Outcomes for all courses.

Skyline College Program Review Worksheet for Enrollment, Performance and WSCH/FTE

Weekly Student Contact Hours – WSCH

Report the 3 previous **Fall** semesters with the most recent on the right.

Year	2005	2006	2007
WSCH	595	622	512

Please comment on program enrollment and expected trends.

While program enrollement wnet down over these 3 years, this last fall (2008) has seen an increase in appliacnts. This is due to the downturn in the economy and the increased interest in healthcare professions. Helthcare is a steady employer and the lay public has now been made aware of that fact.

FTE and WSCH/FTE (LOAD)

Report the previous 3 **Fall** semesters with the most recent on the right

Year	2005	2006	2007
FTE	1.4	1.44	1.56
WSCH/FTE	425	444	328

Please comment on the comparison of this program to College trends.

As with most healthcare programs, the program trends are higher than the collgee as a whole

Retention and Success

Report data on program retention and success rate with the most recent on the right.

Year	2005/06	2006/07	2007/08
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Retention	97%	100%	100
Success	95%	100%	94%

Please comment on the programs success and retention rate. Include factors that affect the rates and how college services are used to provide multiple avenues for student success.

There are several factors affecting Retention and Success rates: 1) this is a vocational program for people who are highly motivated to get a job; 2) this is a full-time program that demands a lot of time from the student who works and has other commitments; 3) the material is complex and requires a lot of study time; 4) hospitals who participate in the clinical training do not tolerate tardiness or absenteeism. Given these factors, it is remarkable we have such high rates of success. To help the student deal with these factors, we provide information about scholarships and Financial Aid, tutoring, and we invite the college psychological counselor to speak to the students regarding her services.

Program Review Course Outline & Prerequisite Checklist

Discipline:

Semester:

ALL COURSE OUTLINES MUST BE REVIEWED AND UPDATED DURING PROGRAM REVIEW!

If there are no changes made to the course outline, use the Program Review date to update the course outline. **Please note that all course outlines must now include the title of a representational text with its publication or revision date and follow the current Title V format.** Refer to *Guidelines for Preparing a Course Outlines* for further assistance.

If it is determined that a course outline needs **substantial modification**, you must complete and submit **Form D – Course Modification** to the Curriculum Committee for approval well **in advance** of your Program Review due date. Please check with your Curriculum Committee representative or go to the Curriculum Committee web site for a list of meeting dates, submission deadlines, instructions and curriculum forms to update (or modify) a course outline. (<http://www.smccd.net/accounts/skycurr/>).

List all the courses in your **discipline** on the attached form. Complete the columns on the form for each course in your discipline using the instructions below:

- Column 1:** What is the course prefix and number?
- Column 2:** What is the course title?
- Column 3:** What date was the course outline last reviewed or updated?
- Column 4:** If this course transfers to either CSU **or** CSU *and* UC, place a check mark in the appropriate column.
- Column 5:** If this course satisfies a GE (General Education) requirement, place a check mark in the column.
- Column 6:** Please list all course prerequisites, corequisites, and/or recommendations.
- Column 7:** Please indicate that the course prerequisites, corequisites, and/or recommendations have been reviewed and validated by faculty by placing a check mark in the column.
- Column 8:** Does the course have SLOs on the official course outline of record?
- Column 9:** Does the course have assessment plans?
- Column 10:** Has the course implemented their assessment plans?
- Column 11:** When did the department review results from implementation of the assessment plan?

Upon submission of your Program Review materials, all course outlines should have the current date in the upper right corner. Please submit a hard copy of **each** outline from your **discipline** listed on the form with your *Program Review* materials. Additionally, all course outline **files** should be e-mailed to the Instruction Office in care of Maria Norris (norris@smccd.net).

Please have the faculty and division dean sign and date the certification on the last page.

**Skyline College Program Review
Certification of Course Outline & Prerequisite Review**

Faculty Signatures

Alice Erskine, RN, MSN, CNOR

Michael Wasilewski, CST

Highlight this text & type in name

Date Submitted: *March 31, 2009*

Division Dean: _____

(Additional faculty signature lines may be added to this form as needed.)



MAPPING INSTRUCTIONAL COURSE LEVEL SLOS WITH INSTITUTIONAL SLOS (*FRAMEWORK, 33-34*)

An institutional student learning outcome is a knowledge, skill, ability, and/or attitude that students should attain by the end of their college experience. Here at Skyline, students who complete the GE requirements or receive an AA or AS degree should have mastered the following institutional SLOs: critical thinking, effective communication, citizenship, information and computer technology literacy, and lifelong wellness.

Mapping course-level SLOs with institutional SLOs enables you to identify which courses within your program may be contributing to student achievement of these outcomes, even though your program's approach may differ from others'. Conversely, mapping gives us the means to determine whether our institutional SLOs reflect our priorities as instructors.

Now that Skyline has defined its institutional outcomes, input the names of the key courses in your program (i.e., courses in a prerequisite sequence, heavily enrolled courses, GE courses, etc.) and determine whether achieving those institutional outcomes are: (c) central to a course or (s) supported by the course. An SLO is "central" if it is essential to the course's intent and therefore an instructional priority, and it is "supported" if addressed but not quite at the level of importance as a "central" SLO. Leave the space blank if the institutional SLO does not apply.

This same process can be employed for programs, such as Student Services Programs, that don't have courses. But instead, map your program outcomes to the institutional outcomes.

**Mapping Instructional Course-Level SLOs
With
Institutional SLOs**

**Surgical Technology Program
Skyline College**

Core Courses:

**SURG 440: Basic Sciences for Surgical Technology
And
SURG 441: Surgical Patient Care Concepts**

Skyline College Institutional Outcomes									
Key: (C) central to a course, (S) supported by a course, (blank) does not apply		SURG 440	SURG 441						
Critical Thinking:	Raise vital questions, formulate responses (or solutions) to problems, evaluate the reasonableness of a solution and provide a justification.	S	C						
	Analyze and compose arguments; assess the validity or strength of an argument using appropriate deductive and inductive techniques.								
	Think creatively and open mindedly within alternative systems of thought; communicate, either artistically, graphically, symbolically, or verbally, a complete and clear solution to a given problem.		S						
	Make effective use of evidence in an argument; evaluate the truth or value of the premises using reliable sources of information.								
	Demonstrate understanding of diverse disciplinary perspectives and use appropriate inquiry, including the scientific method.	C	C						
	Analyze multiple representations of quantitative information, including graphical, formulaic, numerical, and verbal.	C	C						

Effective Communication:	Comprehend, analyze, and respond appropriately to oral, written, and visual information.	S	C						
	Effectively express ideas through speaking and writing.	S	S						
Citizenship:	Demonstrate scientific literacy concerning a range of global issues;	S	S						
	Articulate similarities and contrasts among cultures, demonstrating knowledge of and sensitivity to various cultural values and issues.	S	C						
	Develop attitudes central to lifelong learning: openness, flexibility, intellectual curiosity, and a broad perspective that values diversity of thought.	S	C						
	Demonstrate appropriate social skills in group settings, listening and being receptive to others' ideas and feelings, effectively contributing ideas, and demonstrating leadership by motivating others.	S	C						
	Demonstrate commitment to active citizenship.	S	C						
Information and Computer Technology Literacy:	Effectively locate and access information in numerous formats using a variety of appropriate search tools.	S	C						
	Use computer technology to organize, manage, integrate, synthesize, create, and communicate information and ideas in order to solve problems and function effectively in an information society.	S	S						
Information and	Evaluate the relevance, quality, and credibility of a wide	S	S						

Computer Technology Literacy:	variety of information sources using critical thinking and problem solving skills.								
Lifelong Wellness:	Demonstrate an understanding of physical fitness and its role in lifelong wellness.	C	C						
	Take personal responsibility for identifying academic and psycho-social needs, determining resources, and accessing appropriate services.	C	C						

Program Review - Resource Needs Summary Table

Program Surgical Technology

	Needs	Notes
Personnel	<ol style="list-style-type: none"> 1. Full-time Clinical Instructor/ Laboratory Assistant 2. 3. 4. 	<p>At about 20 hours per week, the current part-time Instructor does not have enough time to keep the lab in order, order supplies as needed, prepare for labs, teach labs, and make clinical site visits.</p>
Equipment	<ol style="list-style-type: none"> 1. Surgical Specialty Instruments 2. Anesthesia Machine 3. 4. 	<p>The goal is to complete standardized sets of instruments for each surgical specialty.</p> <p>The current machine is over 20 years old and does not represent the standards of the Operating Room setting. It will also be used by a proposed Anesthesia Technician Program.</p>
Facilities	<ol style="list-style-type: none"> 1. Completion of installation of computer-based resources in the Allied Health Resource Center 2. 3. 4. 	<p>Progress is slowly being made in this area with the assistance of the other Allied health instructors.</p>

Program Review - Resource Needs Summary Table

Program Surgical Technology

	Needs	Notes