

**DEPARTMENT REPORT
OF
PROGRAM LEARNING OUTCOMES ASSESSMENT**

Department: Surgical Technology

Program (Degree): Surgical Technology (SUT)

Type of Degree: X AAS AA AS ATS AIS

Chairperson: Susan Willin-Mulay Date: 03/12/2002

Person(s) Interviewed: Susan Willin-Mulay and Dwayne Masteller

- I. **Program Curriculum:** A description of the basis for the program curriculum (i.e., how it is derived and validated). Include accreditation organizations, advisory committees or external groups that influence curriculum. Describe curriculum review activities including the review of course master syllabi.*

The Surgical Technician (SUT) program was reinstated in 1997.

The SUT program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP). Initial accreditation was received in October 1998, with no changes in curriculum or structure required, and will last until 2002. CAAHEP provides guidelines for the department on learning outcomes and program structure. Curriculum guidelines for surgical technology programs are established by the Association of Surgical Technologists (AST).

An advisory committee including representatives from eleven area hospitals, program graduates and divisional counselors regularly reviews and makes recommendations regarding curricular issues.

Faculty and some of the advisory committee members reviewed the SUT master syllabi during the past year.

- II. **Program Learning Outcomes:** A description of what you intend for students to know (cognitive), think/feel (affective), or do (psychomotor), when they have completed your degree program. A suggested manageable number of outcomes should be in the range of five to ten. Describe Program Learning Outcomes review activities.*

An entry-level graduate with an Associate of Applied Science Degree in Surgical Technology from Sinclair Community College will be able to:

Learning Outcomes	Related Courses
1. Utilize critical thinking as a basis for clinical judgement and anticipatory decision making when providing preoperative care.	SUT 111, 112, 211, 212, 213 220; BIO 161, 162, 205; ALH 220; MAT 106
2. Demonstrate safe performance of preoperative skills.	SUT 111, 112, 211, 212, 213, 220; COM 206; HIM 121; MAT 106; BIO 161, 162, 205; ALH 220
3. Demonstrate professional behaviors of caring, accountability, responsibility, and respect for the patient's rights of privacy, confidentiality, dignity, comfort, and quality of care.	SUT 111, 112, 211, 212, 213, 220; COM 206; ALH 103; PSY 119; HUM Elective
4. Utilize effective interpersonal communication and group process skills.	SUT 111, 112, 211, 212, 213, 220; COM 206; ALH 103; ENG 111, 112; PSY 119
5. Assume the role of an involved, supportive surgical team member.	SUT 111, 112, 211, 212, 213, 220; PSY 119; COM 206; ALH 103
6. Provide for physiological safety and emotional security of patient and surgical team.	SUT 111, 112, 211, 212, 213, 220; COM 206; PSY 119

III. Assessment Method(s): A measurable indicator of success in attaining the stated learning outcome(s). The methodology should be both reliable and valid. Please describe in detail.

- a. Formative Assessment Method(s) and Description: a measurable indicator of student in-progress success in attaining the stated learning outcome(s).

Required advising occurs before admission into the program and at the end of each quarter.

Each course in the Surgical Technology Program has two types of formative assessments: written examinations and performance evaluations. Written evaluations follow a program test blueprint based on Bloom's taxonomy and the certification examination format. The blueprint for the first year SUT courses is 80% knowledge/comprehension and 20% application/analysis. Application/analysis increases throughout the second year courses.

Performance assessment is based on four curriculum strands of the Surgical Technology Program (skills-perioperative and communication, clinical judgment, professional behaviors, and safety). Faculty and preceptors in the clinical agencies complete a tool with affective, cognitive, and psychomotor criteria that reflect the strands. The tools are four point rating scales that require a rating of 3 to be successful in the course. Feedback occurs formally at mid and end of quarter.

Preceptors, who are oriented at the beginning of each quarter, provide informal feedback weekly throughout the quarter.

Formative performance assessment is also done through end of quarter simulated clinical assessments. Patient-centered scenarios take place in the college laboratory and require the student to perform as if with a patient in the hospital.

- b. Summative Assessment Method(s) and Description: a measurable indicator of end-of-program success in attaining the stated program learning outcome(s).

A mock certification examination is conducted to prepare students for their actual certification exam and as a tool to evaluate program effectiveness. The exam is administered and feedback from a national service is provided to the department.

Students must complete a certification examination within 6 months of employment. Students must be evaluated by the Liaison Council in order to sit for the examination. As of the year 2000 students need to graduate from an accredited program in order to take the exam and become certified.

Students must complete SUT 220 (Surgical Technology Role Transition), a modified capstone course, that involves 25 hours per week of clinical practice and explores few new skills. The end-of-program clinical performance assessment completed by faculty and preceptors in this course is based on the graduation competencies identified by the Program's curriculum, by the Association of Surgical Technologists and the employers of surgical technologists in the Greater Dayton Area. The structured simulated clinical examination administered in the last quarter of the program includes skills and content from the entire program.

IV. Results: A description of the actual results of overall student performance gathered from the summative assessment(s). (see III.b.)

Mock certification exams results reveal 32 of 34 participants (94%) scoring above the national mean. All graduates participating in the (voluntary) actual certification examination have passed.

Surveys to the clinical agencies have provided positive feedback. Employers identify students are strong in the areas of daily preparation for clinical, knowledge, and professionalism. Graduate end-of-program surveys have resulted in similarly positive comments about program experiences and job readiness.

Retention continues to be problematic as the demanding science curriculum leads to attrition in some cases. The program admits 22 students to strive for a cohort group of 15.

Feedback from area employers has encouraged greater emphasis on scope and orthopedic procedures.

- V. **Analysis/Actions:** From analysis of your summative assessment results, do you plan to or have you made any adjustments to your program learning outcomes, methodologies, curriculum, etc.? If yes, describe. If no, explain.

No changes are currently being suggested in program outcomes since they were just established to reopen the program.

In response to retention concerns, a peer study group program and second-year independent lab mentor program was initiated. Early data suggests an attrition reduction of 20% over previous years.

Enhancements in content related to orthopedic and scope procedures have been an on-going initiative. The last two years have seen a concentration on the part of the department to update technological equipment and lecture materials to keep current with the actual OR procedures. The department has acquired actual equipment to demonstrate laparoscopic procedures enhancing student preparedness for this type of experience in the field. Some of this equipment includes actual orthopedic reduction set, electro surgical units, and an anesthesia machine. Due to networking and professional associations with those working in the field, the department has been able to acquire equipment and materials used in the profession without cost or at reduced cost; this provides tremendous benefits to the students as a way of giving them actual exposure and working familiarity with those tools associated with their profession.

Both the mock certification exam and the end-of-program simulated exam identified a weakness in preoperative patient care. The experiences of SUT 111 (Surgical Technology Fundamentals) related to this content will be repeated in SUT 213 (Surgical Procedures III).

ALH 104 (Allied Health Informatics) was moved to the third quarter of the program in order to move ENG 111 (English Composition I) to the first quarter, based on a writing skills need.

Ambulatory care experiences have been increased upon the recommendations of Graduates and the Advisory committee members. These experiences have met with modest success due in part to the less predictable (and thus plannable) nature of ambulatory care.

- VI. **General Education:** Are you using any tool(s) to assess any of the three primary general education outcomes * (communication, thinking, values/citizenship)? If so, describe.

Because of the curriculum framework of the Surgical Technology Program, all of the assessment tools and exams address issues of General Education especially communication, thinking and professionalism.

- a. Where within the major do you assess written communication? Describe the assessment method(s) used. Describe assessment results if available.

Written skills are emphasized in many of SUT courses. Quizzes require students to explain in writing (short essay) reasoning to support and explain responses. Brevity, clarity and specificity in writing is emphasized in the SUT program over more traditional research/essay style writing due to the career emphasis on charting over narrative documentation.

- b. Where within the major do you assess oral communication? Describe the assessment method(s) used. Describe assessment results if available.

Interpersonal communication skills are important skills for application and are assessed in all courses. Discussion and application of listening, conflict resolution, group process and teamwork skills are threaded throughout the curriculum. Assessment tools developed within the department are similar to the General Education Checklists (small group and interpersonal communication sections).

- c. Where within the major do you assess thinking? Thinking might include inventing new problems, seeing relationships and/or implications, respecting other approaches, demonstrating clarity and/or integrity, or recognizing assumptions. Describe the assessment method(s) used. Describe assessment results if available.

Critical thinking skills are essential for SUT graduates and are assessed in all courses. Quizzes follow a short-essay format requiring students to know content and be able to explain appropriate application to a variety of situations. Students are taught to make effective clinical judgments and to follow an established surgical method for all procedures. Scenarios are used as a teaching tool to encourage critical thinking.

- d. Where within the major do you assess values/citizenship/community? These activities might include behaviors, perspective, awareness, responsibility, teamwork, ethical/professional standards, service learning or community participation. Describe the assessment method(s) used. Describe assessment results if available.

Values/citizenship is stressed throughout the curriculum through discussions of ethical/moral/legal issues. Professional behaviors are part of every SUT learning experience. Professionalism is key to a SUT graduate's success with peers, patients and physicians. A code of ethics established by the Association of Surgical Technicians is presented to students in their first quarter and referred to throughout the program. Additionally, ALH-103 (Introduction to Health Care Delivery) grounds students in professional codes of ethics in the health field. Ethical issues are encountered throughout student clinical experiences and become a natural part of dialog for classroom and preceptor interaction.

* Note: The oral communication checklist and the written communication checklist developed by the General Education Committee were adopted for college-wide use during the 1997-98 academic year by Academic Council. Thinking Guidelines developed by the General Education Committee are being piloted by faculty during the 1998-99 academic year.