

# **ORTHOPEDIC TECHNOLOGY**

**ACADEMIC PROGRAM REVIEW**

**SPRING SEMESTER '08**

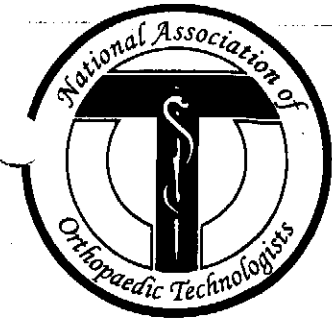
## ADJUNCT FACULTY

Thomas Byrne, OTC, OPAC

Harold (Cris) Rice, OTC, OPAC

Michael Parrish, OTC





# National Association of Orthopaedic Technologists

## EXECUTIVE COMMITTEE

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Nicole Williams, OTC

### Publications

Robyn Masseth, OTC

### 27th Annual

### Clinical Symposium

August 5 - 8, 2009

Memphis Marriott Downtown  
and Cook Convention Center  
Memphis, TN USA

## MEMORANDUM

**TO:** Tom Byrne, OTC  
Senior Instructor  
Grossmont College Orthopaedic Technology Program

**FR:** Bruce Davis  
Meeting & Marketing Manager

**DT:** October 1, 2008

**RE:** NAOT Recognized School Application Approval

---

I am pleased to inform you that Grossmont College's application for renewal of NAOT-recognized-school status has been approved by our education committee. Please find your certificate enclosed. If you have any questions, please don't hesitate to contact me by email at [bdavis@hp-assoc.com](mailto:bdavis@hp-assoc.com) or by phone at 317.205.9484.

Thank you for your continued commitment to academic excellence for orthopaedic technologists.

National Association of Orthopaedic Technologists

BE IT KNOWN THAT

**the Orthopaedic Technology Program  
at Grossmont College**

has met all the requirements set forth by the NAOOT Review Committee for Orthopaedic Technology Educational Programs and is hereby designated as a

**NAOOT-Recognized Program**

In witness thereof, the authorized officials have set their signatures this first day of October, 2008. The above named program is recognized from October 1, 2008, until September 31, 2010.



Cynthia Henderson, OTC, LO  
NAOT President



Kent Lindeman, CMP  
NAOT Executive Director



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**GROSSMONT COLLEGE**  
**ORTHOPEDIC TECHNOLOGY PROGRAM**  
**ACADEMIC PROGRAM REVIEW '08**

## **SECTION 1 – OVERVIEW**

Department/program history, recent trends, response to last review recommendations.

### Concise History

#### 1.1

Introduce the self-study with a brief department/program history. Describe any unique characteristics, concerns or trends affecting the program and any significant changes or needs anticipated in the next three years. These may include items such as increases or decreases in number of full-time and adjunct faculty, sections offered, and growth or decline of the department/program. Remember this is a broad general assessment versus the more detailed responses and recommendations covered in the following emphasis areas. (max – 1 page)

The Orthopedic Technology Program began in Fall semester 1981, funded by the Regional Occupation Program, authored by and all courses taught by adjunct faculty members. Originally organized with Monday / Saturday labs and Tuesday / Wednesday lectures. This has been modified to a Monday / Wednesday didactic and Tuesday / Thursday lab. The extensive room requirements and modifications led to the establishment of the use of 352B as an assigned room. This room is shared to this day with other departments on campus. The room is converted to a lab setting for each session by moving the desks to the side of the room, laying a protective tarp and then moving the treatment table from the back of the room. The lab requires a large amount of consumable supplies and other orthopedic devices. The “office” is the storeroom for books, supplies, teaching materials, skeleton, traction equipment, cast materials etc. The proposed new building on campus will, hopefully, resolve this ongoing problem.

Through the continuous efforts of the members of the Advisory Board and the most generous time and dedication of Dr. Wayne Akesson, Professor and Head Department of Orthopedics Veterans Medical Center as well as Dr. Alexandra Schwartz, Associate Professor of Orthopedic Trauma at UCSD Medical Center, the curriculum is constantly being updated. Thomas Byrne, OTC, instructor in the program has been named to the National Honor Society of the National Association of Technologists as well as serving as Educational Chair of the California Association of Orthopedic Technologists. Participation in all state and local meetings maintains another source of updates to specific aspects of orthopedic patient care modalities. These are directly translated to the students in the Orthopedic Technology Program.

It should be noted that Mr. Byrne has retired after 37 years from UCSD Medical Center. He remains a full time Orthopedic Technologist now with the Sharp Health Care system. There are 11 former students working with him at that facility. This move does provide an important source for the program previously lacking, that is, the private practice setting's idiosyncrasies. That important aspect of the program will now be more accurate. The Sharp Rees-Stealy Clinic Administration has already involved itself with the program by allowing summer session didactic lectures to be held in the Orthopedic Clinic.

The administrative guidance of our Director/Chair Rick Kirby keeps the course as well as staff in compliance as well as informed on Grossmont College Policy and concerns.

The program is stable and is operating at optimum enrollment. There is a very strong demand for graduates of the course.

The generous donations of consumables and resource materials for the course comes from Ortho-Plus, Zimmer and Royce/Usner. The supplies provided by these private companies amounts to many thousands of dollars. We are most grateful.

## DEPARTMENT/PROGRAM GOALS

### 1.2

Appendix 1 contains the most recent Educational Master Plan for the Department/Program. Make comments on the following:

- Which goals have been met?
  - What actions have been taken in achieving these goals and objectives?
  - What obstacles have encountered?
  - How have these goals changed and why?
- 1) Portable vacuum attachments for room 352B have been added in lieu of the new building planned to open next year, hopefully. A conscientious effort to address the dust problem as it concerns health and safety issues has been made. New tarps and strong student participation as well as an increased emphasis on airborne contaminants has been established and the results are notable. ROP have provided large shop vacuums and wet mop systems that not only improve the air quality but will continue to be effective when we move to the new building. It should be noted that even with the new construction we are limited by building design in the exhaust fan systems that are built in. Dust is an inherent side effect of our profession. This is true in the lab setting, but is just as much a concern as well as a problem in real clinic facilities.

- 2) Maintaining and expanding linkages with local medical facilities to provide clinical experience for students has been accomplished with a very substantial effort. The UCSD Medical Centers Council on Allied Health Accreditation requires a very in-depth report. The Orthopedic Technology Program has been approved for three years following presentation of that report to the UCSD Board. At the same time the Veteran's Medical Center's review was also due. That report, too, was well received after a very complex compliance list was met. The National Association of Orthopedic Technologists also required a concise report for the Orthopedic Technology Program to receive "Recognized" status. This allows our graduates to take their board exam upon completion of the course, without the usual two year wait. That report was also approved and we have received that status for another two years.

Mr. Byrne's new employer, Sharp Health Care, is very interested in participation in the program. They have already provided a clinic setting for the summer didactic. Further, as previously stated, Mr. Byrne's experience at Sharp will enhance his, and therefore the students private practice knowledge base.

- 3) Expanding and maintaining orthopedic manufacturers as resources is most challenging in these times of constant corporate buying and selling. Sponsors for the Orthopedic Program, though remain constant and even improved. This is due to the personal relationships with managers and executives who, while the company names change, they remain in leadership roles. We are proud of our program's efforts to maintain this industry support, which amounts to many thousands of dollars in materials for the course. Notable is the fact that there is large population of corporate leaders in the orthopedic industry who are graduates of Grossmont Orthopedic Technology Program have gone on to management positions in these same organizations.

- 4) Maintain and increase adjunct faculty pool:  
Mr. Michael Parish, OTC, graduate, currently an instructor with Boston-Reed Orthopedic Program, has agreed to come on board as a substitute with the plan of providing a replacement for faculty as needed.

Mr. Michael McMillan OTC, graduate and current lab assistant in the program has been hired by UCSD as a full time Orthopedic Technologist and will help to provide direction for students in the Clinical Practicum at UCSD, as will

Lindie Tyler, OTC, also a graduate, will act as primary contact at UCSD. These additions will ensure continuity of the course following Mr. Byrne's change of employment location.

## Implementation of Past Program Review Recommendations

1.3 Appendix 2 contains the most recent Program Review Committee recommendations for the program/department. Describe the changes that have been made in the department/program in response to recommendations from the last review.

- 1) Continue to train adjunct faculty in instruction and administration of the program. Train an adjunct professor to assist Mr. Byrne in the instruction and administration of the program.

Lindie Tyler, OTC with over 12 years experience at UCSD as Mr. Byrne's partner in patient care as well as the addition of Michael McMillan, OTC will team up to provide the continuation of student clinical experience at UCSD Medical Center. Dr. Alexandra Schwartz and the impressive physician/educators of UCSD's Orthopedic Department will continue to insure the quality of this clinical rotation site.

Michael Parrish, OTC, has over ten years experience at Palomar Medical Center as well as Sharp Rees-Stealy. His work with Boston-Reed's Orthopedic Program as one of it's organizers as well as primary instructor, will add the long sought after future adjunct staff as well as an additional support now.

Cris Rice, OTC, graduate with some 18 years experience is a full time OTC for the Kaiser Permanente Health Care System. Cris is the lead for some 26 of our graduates employed by that organization. He is THE consummate lab instructor. He is in the process of hiring a new assistant. All of his previous lab assistants have gone on to solid positions in the field. We are most proud of the level of teaching he provides. The success of our students and their ability to keep their jobs is directly attributable to Mr. Rice's ability to translate the theory taught in lecture to the practical application of that theory to actual patient care.

- 2) Explore the possibilities of designing a multi-use classroom that can be effectively utilized by OT and other allied health departments.

Carrie Clay, Mr. Byrne and Mr. Rice, as well as the ROP Office have spent the last several years very much involved in the continually changing proposed new building that has a dedicated lecture/lab room for the program. Many versions of many blue prints have been reviewed and revised. We have met with and communicated with the planners and hope for a new facility with many improvements that will enhance the student's experience.

- 3) Utilize the Library faculty to do group bibliographic instruction for research projects.

The research paper that is required in the course is designed specifically to teach the students how to search for sources of credible information that relates to Orthopedic patient care. This skill is key to the future success of our graduates, as continuing education is required to maintain competencies and to keep the jobs they have. Weekly Grand Rounds presentations at UCSD make the point graphically to students who witness Orthopedic Surgeons teaching each other on the specifics of changes in techniques and technology used in their specialty.

Students have on several occasions met as a group for sessions with Library faculty on proper bibliographic documentation. We do strongly believe that the protocols and legal aspects of the documentation of sources in the medical field is especially sensitive. Certainly there are 20 opinions on any one subject in medicine. It is the details of whose opinions and in what context that establish credibility for the sources our students must learn to search for.

The Orthopedic Program depends, heavily, on the Grossmont Library staff and facilities. From the staff's accommodations for our learning disability students to their technical help, we are most appreciative.

- 4) Incorporate the updated ROP competencies in the Grossmont College Course Outlines.

The current ROP competencies have been submitted for addition to the latest Course Outline for Orthopedic Technology.

- 5) Establish ties with the counseling department so that counselors are better informed about the program and its career ladder.

The ROP staff as well as the instructors of the Grossmont Orthopedic Program are in communication with the counselors with regard to how our program educates and how and where our students employed.

- 6) Expand the clinical affiliates to involve private practice offices and clinics.

The Grossmont Orthopedic Program has clinical rotation sites at UCSD, V.A.M.C. and Rady Children's Hospitals. With some effort we have received clearance for student rotation at the very private OrthoMed Clinic which is located in LaJolla and is staffed by UCSD Professors. This is a no small addition, for this is a much different experience for our students. We have Dr. Reid Abrahms Professor of Hand Surgery at UCSD for his assistance in gaining access to this site.

As previously noted, Mr. Byrne is working with the Sharp system to establish contractual agreement for student rotation at the Rees-Stealy facility as well as Sharp Main Hospital. The 11 technologists who work within these areas are all graduates of our program. The physicians here are very much aware of the importance of the orthopedic technologists knowledge of operating room and private practice clinic variances and have already allowed summer didactic at the Rees-Stealy facility with plans to expand the relationship.

#### Advisory Committee Recommendation

- 1.4 Summarize the principal recommendations of the program advisory committee since the last program review. Describe how the department has responded to these recommendations. Include the date of last meeting and frequency of meetings. List organizations represented.

The Grossmont College / ROP Orthopedic Technology Programs Advisory Committee meets annually.

The members of the committee are:

Physician Medical Director:

Wayne H. Akeson, M.D. Professor and Head Veterans Medical Center, La Jolla  
former Professor and Head of Department of Orthopedics UCSD Medical Center  
former Dean UCSD School of Medicine

Physician Medical Advisor:

Alexandra Schwartz, M.D. Ass. Professor Orthopedic Trauma,  
Department of Orthopedics UCSD Medical Center

Physician Medical Advisor:

Michael Botte, Department of Orthopedics Scripps Greene  
Professor Emeritus Foot and Ankle Surgery, Hand, UCSD

Director of Regional Occupation Program:

Carrie Clay, Assoc. Dean R.O.P.

Program Coordinator:

Rick Kirby, Grossmont College Cardiovascular, Orthopedic Technology Coordinator

Medical Industry Advisors:

George Clark, National Zimmer Product Manager  
John Sillic, Western Director Zimmer OSP  
William Bull, Western Director Royce/Usser Orthopedics  
Adam Owen, Regional Manager EBI Spine/Trauma Division  
Maria Zouvas, DePuy Spinalogic  
Kevin Helmer, Pres. Mission Surgical  
Cris Leventis, Pres. Ortho-Plus, Biomet  
Michael Vaughn, Manager, Southern Calif. Orthotics and Prosthetics  
Kell Bergman, Owner, President SCOP

Technical Advisors:

Tom Byrne, OTC,OPAC, Surgical Orthopedic Specialist Sharp Rees-Stealy  
Cris Rice, OTC,OPAC, Lead Orthopedic Technologist Kaiser Zion  
Lindie Tyler, OTC Senior Orthopedic Technologist UCSD Medical Center  
Becki Scelso, OTC Senior Orthopedic Technologist Pediatric Private Practice  
Michael Thomas, OTC Orthopedic Technologist, Rady Children's Medical Center  
Anthony Roman, OTC,OPAC Mission Viejo Orthopedics  
Manny Gates, OTC,OPAC Scripps Greene Clinic  
Ryan Park, OTC, Kaiser Permanente  
Deeann Lawler, OTC, Life Sharing Inc.  
Michael Parrish, OTC, Sharp Rees-Stealy Orthopedics  
Michael Johnson, OTC, Surgical Orthopedic Specialist, Sharp  
President Assoc. of Orthopedic Technologists of Calif.  
Michael McMillan, OTC, UCSD Medical Center, Lab Tech.  
Robert Nelson, OTC, OPAC Pacific Orthopedics  
Kevin Goodwater, OTC, Sharp Rees-Stealy Orthopedics

Recent recommendations and actions:

The 2006 Grossmont Orthopedic Technology Program Advisory Board meeting held at the 4 Points Sheraton, as guests of the

2006 SANDAG Career Educator Summit:

"The aging population and their health care needs will increase. So will health care and personal training. Health and fitness careers are estimated at a 29% growth rate over the next three years."

While this quote is most encouraging regarding the future demand for allied health jobs, it was noted at committee that Dr. Akeson, our director was quoted with almost the same percentage of growth .... 5 years ago: He is always right.

Regarding Clinical Hours (Hospital Practicum OT- 214) the students of 2006 have had fewer clinical hours upon completion of the course. The issue arises from the situation wherein many of that year's class were offered full time employment as Orthopedic Technologist, many still pending their board exam. It is the opinion of the Advisory Committee that is a compliment to the course. With 17 of 19 students passing the NBCOT exam, confidence in the level of students produced in this program within the community is very strong. Physicians and managers seeking well qualified career employees call directly and as suggested by the Committee "we will send them."

As previously stated there were very complex, totally revised, UCSD and VA evaluation reports due this year. These too, in great detail, establish that the Grossmont Orthopedic Technology Program complies with the every detail of the requirements for access to these great sources of experience for our students. It was far more intricate this time as the National Assoc. of Orthopedic Technologists Recognition Committee also had a report due to them at roughly the same time.

All clinical reviews as well as the NAOT requirements were approved for their maximum time.

E.S.L.R's basic and Soft Skill requirements were reviewed and it was observed that these were "strongly evident within the curriculum of the program".

The syllabus, Course Outline and Competencies were approved, with the strong effort of Mr. Rick Kirby noted.

Supplies and Equipment were discussed and a request for 8 new exam tables, 2 cast saws, and 6 roller stools was approved and has since been received.

Student attendance at the CAOT meeting, a very impressive meeting with some 108 attendees, has been made free to all Grossmont Ortho. Tech. students. This is a great meeting for them for job networking, M.D. lectures and hands-on training.

17 of the 19 2006 student graduates, all those who passed the NBCOT Board Exam found employment as full time in the field. Of note, UCSD has hired 2 and plans on hiring 2 more in 2007. Sharp has also 3 new positions with plans for another.

The Committee thanked Dr. Akeson, Mr. Rick Kirby and all the ROP staff for their constant, continued support.



## SECTION 2 – CURRICULUM, ACADEMIC STANDARDS, AND SUPPORT SERVICES

In Appendix 3, Catalog Descriptions, insert copies of your catalog descriptions from the most recent college catalog. If your program has an Associate Degree program, include the relevant pages from the catalog.

To complete Appendix 4 Course Status, review your course outlines and complete the form in the appendix to reflect currency of the courses, offerings, and alignment status.

- 2.1 Review all course outlines and comment on where your program is in the process of maintaining currency. Verify that the course outlines reflect the writing, reading and problem-solving skills, quantitative reasoning, and critical thinking across the program's curriculum

The course outlines have been reviewed. The course content, catalog descriptions, and course objectives verify that reading, writing, problem solving skills, quantitative reasoning and critical thinking are prominent throughout the curriculum. In lecture as well as lab settings, the students are divided into groups and assigned projects that foster the use of basic skills, quantitative analysis and especially critical thinking as it applies to functional anatomy, diagnostic and interventional patient care practices.

- 2.2 How does your department make decisions related to the following?
- a) Identification of student learning outcomes
  - b) Methods to demonstrate achievement of these learning outcomes.
  - c) How do you use this information for course and program improvement?

The Occupational Competencies list from R.O.P as well as the lab and clinical hospital practicum Competency Check Lists best identify the student learning outcomes. The written quizzes as well as final exams also demonstrate the levels of student understanding and skill level as well delineate where each individual student is when compared to expected outcomes. Lab projects and related lectures can be adjusted and reviewed at the semester curriculum development meeting held with instructors and clinical and hospital staff. These changes are then presented to the Advisory Board, specifically the physician advisors for review, revision and approval.

The required research paper also is a demonstration of learning levels as it has the student find and present their own learning outcome in the form of the sources found, the organization of the information from those sources and the direct application of that information to the subjects relevance to Orthopedic Technology.

- 2.3 Explain how the program maintains academic standards, integrity and consistency to assure that current curriculum adequately meets students' needs. Explain how the program ensures that all instructors teach to the official course outline.

As previously stated the course content is monitored by the faculty and the Advisory Committee members. It should be noted many former students are on the committee to help to adjust curriculum to the changes in the profession. These adjustments are to insure that the course is consistent with the needs of graduates in the field.

Mr. Byrne wrote the original course outline with the strong assistance of Dr. Akeson. All that we do is aimed at the maintenance of those standards. Our Orthopedic Technology Program is THE model for all others in the nation. Constant input from employers, graduates and physicians in the field keep us very much up to date on where we are with regard to academic standards.

The faculty's attendance and participation at local, state and national professional symposiums also ensure that we are honest in our assessment of what and how we teach.

96% of our graduates pass the NBCOT Board Exam, this compared to the 15 year national average pass rate of 66.5% . – consistency.

- 2.4 Using Appendix 5, Grade Distribution Summary Report, comment on retention and grading variability figures. Discuss any specific courses that have unusual patterns of grading variances.

I don't give grades, I report them. The class average grade for a skill or test is my grade as an instructor.

Those graduating from the Orthopedic Technology Program enter a field that is very conscious of appropriateness. From direct patient care to the marketing side of the job market, professionalism is the chief component of how one is judged. We have, over the years, been made very aware of the expectations of prospective employers and how the level of graduates we produce determines our future for consideration as a source for technologists. Therefore, I have become more precise in documenting, especially in the clinical practicum, student attitude, professionalism, communication skills and basic appropriate behavior. Students sign an agreement that specifically spells out what is considered proper behavior.

- 2.5 Describe strategies employed to ensure consistency in grading multiple section courses.

There are no multiple level sections in any of the OT courses.

- 2.6 Describe how your program encourages students to extend learning outside of the formal classroom.

- 1) Health Professions Computer Center
- 2) Grossmont LRC – research paper
- 3) Grand Rounds (UCSD Wed. am)
- 4) Resident Trauma Rounds (UCSD Thur. am)
- 5) UCSD Melvyl data base, Medline, UCSDPubmed
- 6) State and local professional association meetings CAOT and NAOT

- 2.7 Describe and give rationale for any new courses or programs you are developing or have developed since the last program review. How have current issues (environmental, societal, ethical, political, technological) been reflected in your curriculum?

Certainly the recent emphasis on the ethics and social as well as the political concerns of HIPPA with its strict access limits to medical records and how these rules must be understood and apply directly to how those in our profession as well as students in clinic settings treat patient identification. At the same time respect and acceptance of cultural variances are to be noted.

Absolute knowledge of blood and airborne pathogens, safety protocols as well as the almost monthly changes in the technology employed in orthopedic surgical procedures and clinical patient care, all require our faculty to be more than up to date. These changes are immediately reflected in the content of the NBCOT Board Exam.

- 2.8 In Appendix 4, Course Status, list the courses in the program that are duplicated at Cuyamaca College.

Not applicable. Course only offered at Grossmont College.

### **Innovation/Special Projects/Community Involvement**

- 2.9 Describe instructional innovations and/or special projects undertaken by the program or individual faculty members including the use of technology.

In order to properly instruct students on the subjects of Orthopedics there must be sources to add to the constant changes in what is and is not state of the art patient care technique and technology.

Tom Byrne, instructor, chose to take on one aspect of orthopedics, that is a new methodology that has prompted questions from students and patients as to its indications and contraindications. That subject was the concept of "Minimally Invasive Surgery". Sounds good. Well, following a two year effort to update my students, Mr. Byrne has developed a comprehensive overview of each of the aspects of this technical modality of care, its positive applications as well as its limitations.

The lecture presentation became the Keynote Address for the National Assoc. of Orthopedic NURSES (that's right nurses). The presentation in Phoenix was to some 2700 nurse specialists. Following that the Canadian Society of Orthopedic Technology requested the presentation as their Keynote Lecture at their annual symposium in Toronto.

The content of the lecture made with video and PowerPoint presented not only an overview of the subject matter but also a review of evidence based medicine. How do we judge outcomes. What is it about a procedure that results in an outcome that is "better". Who decides what is "better" for the patient. What are the criteria for a good patient outcome. Is this innovative? Well, the subject is now an international debate.

Wheelessonline.com is the Orthopedic Surgery resource site of Duke University. Access is made on the classroom Smartcart and students also make use of this resource designed for Orthopedic Physicians. HMMC.com is the site for Hennepin County Medical Center. Mr. Byrne is an annual speaker for the Orthopedic Trauma Symposium there and the resources presented are available at this site. These are true educational sites, not some random website. Physicians use these as resources for updates.

- 2.10 With the interest and needs of the community in mind, describe any outreach or community activities initiated by the program.

Patrick Henry, Santana High School and Granite Hills High School seniors rotate through UCSD's Cast Room and Orthopedic clinic while patients are being actively treated by our students. The program was initiated by several staff members demonstrate to these seniors that there are more medical profession than physician or nurse. In-class presentations by our staff have been made at elementary schools from Point Loma to LaJolla.

From pharmacy to radiology to orthopedics there are many ancillary health care careers beyond the physician/nurse. This direct contact with patients and staff brings home that point.

Students and their teachers, who attend these sessions with them, are invited to sit in on lab sessions at Grossmont College.

The Preuss School is a specialty high school for students intending to enter UCSD, many as a prelude to medical school. Each student who attends, evaluates their day at the clinic in a written report and there is an annual lunch to thank those of us who walk them through the patient care aspect of medicine. They spend the day, like the Santana and Granite Hills seniors, witnessing actual patient care and the role played by the Orthopedic Technologist.

- 2.11 Provide specific examples of program or individual efforts aimed at encouraging students to become actively engaged in the learning process.

Grand Rounds, held weekly at UCSD Medical Center, is a four to five hour session wherein Orthopedic Residents present technical, surgical and medical problems and methods. The presentations are to the private and academic M.D.s in the community. The students witness first hand how medical knowledge is presented and the great lengths made to document any and all sources. Often very intense debates develop over new vs. old techniques or protocols. Our students become aware that in our business it is possible that there may be three ways of doing any two procedures. Which is right or more appropriate? The students use this debate like process in their research paper where they are very likely to find multiple "right ways" to treat or diagnose orthopedic problems.

Trauma Rounds are very different. In the Grand Rounds setting our students do not take part directly. In Trauma Rounds held weekly in the Radiology Hall, our students are mixed with UCSD Med. Students and interns. Dr. Schwartz reviews all in-house ortho-trauma patients and their films which are digitally viewed on shared screens. Everyone present is required to participate directly with observations, questions and answers. Here the language of lecture mixes with specific applications of that terminology as it relates to actual patient care modalities. It is truly deductive, critical thinking.

The required student research report takes the case presentations, the documentation of sources and evidence based medicine the student's experience first hand in lecture and in the Grand and Trauma rounds at UCSD and lets them come up with their own version of data presentation.

- 2.12 Explain the program's relationship to others on campus (e.g., fulfill prerequisites for other general education programs, cross-listing, interdisciplinary course offerings, offering communities.)

Biology 214 is a prerequisite for our program. Our students can obtain a Grossmont College Associate of Science Degree if they successfully complete

all aspects of the Orthopedic Technology Program as well as all Grossmont College's requirements for a Biology A.S. Degree.

### **Campus Resources**

2.13 Indicate what the program has done to formalize links with the following college support services:

- \* Learning Assistance Centers (Biology Learning Center, English Writing and Reading Centers, Math Study Center, Tutoring Center)
- \* Technology Mall
- \* Instructional Media
- \* others

Orthopedic Technology Syllabus:

“Students are reminded to enroll in the Supervised Tutoring Course OT210/211 for additional independent tutoring assistance ...” enroll in IDS 198 Supervised Tutoring in the Tech Mall and IDS 198T for 1 on 1 .... These are non-credit, non-fee courses.”

Annual Student Development Service's Nancy Davis presentation on job resume, cover letter and interview techniques.

Health Science Computer lab is available for research paper and class prep.

Second floor Library Technology Resource Center staff provides private, secure rooms for learning disability students requiring such accommodations.

Also provided at this site is specific bibliography format presentation to assist in proper form for research paper required.

2.14 Evaluate and provide a summary of the current status of library resources related to the program. Use subject specialist librarian assigned to your program to assist in the evaluation. Consider books periodicals and online resources.

The Orthopedic Technology Program has a standing annual tutorial by library specialists regarding bibliography and medical resources, both on-line, journal and monographs that relate to orthopedic subject matter. This knowledge is valuable for the research paper the students are required to produce, but its real value is in the continuing, career long, need for continuing education to maintain their professional credentials.

- 2.15 Describe the working relationship between the program and the Counseling Department in terms of exchanging specific and current information about your program that counselors can use to help students develop education plans and make career decisions.

Personal Development – Counseling Class from Nancy Davis and Cindy Hall from the Career Center is an annual presentation to our Orthopedic Technology program in the spring semester. Presentations by the staff on career, resume and cover letter skills. This is a Very important resource for our students. Many have commented on the key points covered involving job search, interview and marketing of skills.

- 2.16 Comment on the results of the student survey, Appendix 6, regarding campus resources.

72.2% indicated the classrooms were not in good repair/clean.  
77.8% felt the classroom equipment is not up to date.

94% thought the computer technology (smart cart) was up to date.  
100% felt the bookstore had texts as needed.

23% used the Assessment & Testing Center  
63% used the Career Center  
92% used the Counseling Office  
45% used the Writing Center  
23% used the Reading Center  
50% used Health Services

94% used the LRC: computer lab (SETL)  
94% used the LRC Main Library  
53% used LRC: Instructional Media

25% used the Math Study Center  
20% used the Tutoring Center

## Articulation

- 2.17 List courses that have formally articulated with the high schools. Describe any articulation and/or collaborative efforts with K-12 schools.

As previously stated there is an annual student/teacher activity with direct high school student contact with our program instructors and students in their clinical rotation (OT214) with Granite Hills, Patrick Henry and Santana High School seniors with interest in health care attend. Again, the concept is to demonstrate dramatically that there are other aspects of medicine that are not physician or nurse, and that do not require multiyear or advanced degrees.

The Preuss School has made this rotation a formal part of their curriculum. Sumi Castelic, former CEO of UCSD Medical Center and now administrator at Preuss, has expressed her sense of the value of this rotation. Letters from students of every level have made it obvious that many were unaware of the variety of careers available in the Allied Health field.

I feel this is a very important outreach that teachers and students seem to appreciate.

- 2.18 After reviewing ASSIST.org and the Grossmont College articulation website, please identify if there are any areas of concern or additional needs your program has about articulation with four-year institutions. Please describe how the program ensures that articulations with key four-year universities are current.

Our students are well aware of the ASSIST.org and TAG as well as other resources for their four-year school plans. Many have gone on to advanced degree programs. While UC and CSU institutions have a direct link with Grossmont College some of our graduates have also gone on to USC and Stanford as well. Physician Assistant, Nurse Practitioner, both Masters programs, are the primary advanced degrees sought out by our students.



### SECTION 3 – STUDENT ACCESS AND SUCCESS

- 3.1 In addition to the innovations listed in 2.11, describe specific ways the program has adjusted or developed curriculum to foster student success. (e.g. pre-college, on-line courses, honors courses, web enhanced learning)

The constant adjustment of specific course content is demonstrated by the success our students have had in finding and especially in keeping jobs in the Orthopedic field. What was standard of practice three years ago is no longer accepted technology. We, the program, MUST keep in constant communication with our Medical Advisors. We must keep members of our Advisory Committee aware of what we are teaching. We MUST apply the standards of practice and technologies that we ourselves employ every day in our professional experience.

Web enhanced learning is certainly an expanding aspect of medicine with PubMed, IndexMedicus and Wheelessonline.com students can find resources to present another format for learning or just expand the depth of materials studied in the classroom. These specific sites are used by the UCSD Medical Students and even faculty in daily clinical practice. This example is great for our program, as students witness first hand the need for this kind of enhanced source for information. As UCSD clinical students, all PubMed access as well as Melvyl is free.

- 3.2 Analyze Appendix 7, Statistical Data: Outcome Profile, and comment on strategies utilized to address the needs of various cohort groups. Provide specific strategies that have been used to meet the different needs of your students (e.g. re-entry, academically under prepared, working, disabled, limited English.)

Re-entry:

Many of our students are mature, re-entry students who, for various reasons, are seeking an effective means to get back into the job market. This same population can also be unprepared for the challenges of the classroom. Test taking, notes, all the things that make a course work are thought out by our staff. Ways of preparing our students for a new career means giving them the skills for the board exam and the ability to learn on the job in order to maintain continuing education requirements of the profession. Our program has developed a reputation in the industry for mature, knowledgeable adults who bring value added skills with them.

Our course is offered only in the evening, Monday through Thursday to allow our students to work normal hours and still be able to attend class. Our own teaching staff works full time (and takes call) and teaches. There is a strong sense of for empathy our students.

Disabled Student Services provides an excellent contact for any student with physical or learning difficulties. Together with the recommendations from this office and our own efforts, many of these students are successful.

English Second Language Office has proved to be another resource we employ when we meet with language issues. From Japanese to Arabic to Russian we have had many linguistically diverse students. Their difficulty does come when they try to find employment in the community as well as the obvious difficulties with the National Board Exam.

- 3.3 If state or federal registration examinations govern the program please comment on student success.

The 25 years of National Board of Certification for Orthopedic Technologists has a 66% pass rate nationally. Our Orthopedic Technology Program has a 96% pass rate for that Board Exam for the same time frame.

- 3.4 Discuss strategies and/or activities that have been, can be or will be used to promote/publicize the program. Include activities your faculty have implemented to provide closer connections to primary, secondary and post secondary schools. Consider campus/district resources that have been useful. Using the Student Survey, comment on how students learned of this program.

With regard to the Student Survey results:  
"How did you learn of the program?"

38.9%	College Catalog
38.9%	Friend or family member
11.1 %	Instructor
11.1%	Grossmont webpage (ROP)
5.8%	College Counselor
5.8%	Work referral

Please refer to the previous section 2.17 regarding high school and post secondary efforts by instructors to promote the program.

First Aid volunteer coverage for special events has long been emphasized as part of community service in the Orthopedic Technology Program. Our students have actively participated in the Heart Walk, 3 Day Breast Cancer Walk, San Diego Soccer High School, Scripps Ranch July 4<sup>th</sup> Run Ride, Pacific Shoreline Marathon as well as special requests for assistance through contacts with the faculty.

We also have a very long standing relationship with the Challenged Athletes Federation through Southern California Orthotics and Prosthetics, and are very active with the events as well as athlete support.

3.5 Referring to Appendix 7, Statistical Data, Outcomes Profiles, Appendix 8, Efficiency Report, and Appendix 5, Grade Distribution Summary Report, comment on emerging trends of course completion, success, retention, and enrollments.

Fall '02: 24 students	Spring '02: 20 students
Fall '03: 19	Spring '03: 19
Fall '04: 28	Spring '04: 25
Fall '05: 27	Spring '05: 21
Fall '06: 33	Spring '06: 20

Enrollment is optimal at 20 -25 students, based on lab space and materials used. With regard to grade distribution, the higher than standard courses number of A and B grades reflects the demands of the program which continually reminds students that this is a class leading to a profession, a profession with a very high standard of practice.

When you evaluate success you must look at the number of working professionals that come from the completers. The number of working professionals, in the medical field related to the course, is 78% of the graduates. We consider that a high rate of success.

Retention is subject to the same constraints seen in medical schools. That is, that not all interested, intelligent students do well in direct patient care. If you factor in the patient care that these technologists provide is a very hands-on, involving traumatized patients, not everyone is suited for our profession, even with high academic success. Some just find out in the clinical rotation that this is not for them.

- 3.6 Referring to appendix 9, if the program offer a major or certificate in the college catalog, comment on the trends regarding number of students who earn these degrees or certificates.

All successful graduates of the Orthopedic Technology Program receive Certificates of Completion from the ROP office. These state successful completion and specific occupational competencies for each individual.

Students may petition for an Associate of Science Degree from Grossmont College upon completion of all aspects of the Orthopedic Technology Program as well as all requirements of the Biology degree requirements.

One trend of note is the increasing number of students enrolling who have Bachelors Degrees in biology, athletic training, and physical therapy. These students are seeking ways to enter the job market and our program is a very effective way to gain employment in an area directly related to the degree they have earned.

I have no detailed statistics available on the actual number of A.S. Degrees for Orthopedic Technology that have been issued. I am aware that this has become a strong addition to resumes for those seeking employment.

## **SECTION 4 – DEVELOPMENT OF HUMAN RESOURCES**

**In Appendix 10, complete Conference, Workshops, Staff Development and Sabbaticals forms.**

- 4.1 Describe how participation in activities in Appendix 10 have resulted in improvement in curriculum and instruction.

The ROP Staff Development Meeting each semester is a very important means of updating our instructors on resources and specific Grossmont College campus issues. Carrie Clay provides a very diverse series of speakers covering many concerns of staff and students. We are very grateful that this 3 to four hour presentation is held in the evening. This allows the Orthopedic Technology faculty to attend, as we all work full time days as well as take call. Carrie Clay also arranged for our Advisory Meeting to be held at the SANDAG Conference wherein the future of employment trends as well as specific fields that will grow in the future. This not only allowed our staff to make direct

contact with many leaders in the community, but also to see the effects of changes in our community and the needs it will have in the future.

National meetings such as NAON and NAOT provide THE latest in the theory and practice of our profession. Along with our California Association meetings these provide education, but they also allow our students (yes they attend too) and staff to network with our graduates who are now working. Instructors and students communicating with these former students help us to stay up to date. For the past three years one of our students has been awarded a grant to attend the National Association for Orthopedic Technologists Symposium.

Our staff has never been on a sabbatical.

4.2 Forecast your staff development needs within and outside of the institution.

If indeed the state adult education budget eliminates ROP funding, our staff will have a great need for someone to lead us. The meeting and constant contact by Carrie Clay and her amazing staff have kept our instructors aware of compliance, security, policy and all matters related to the Grossmont College Campus. We will, more than ever, need that support. The truth is we also need evening staff development, perhaps a summary or compilation of subjects or at least important updates.

I truly believe that without Michelle (ROP) I would be unable to continue.

4.3 Describe how the members of the program are helping to shape the direction of the college (e.g. grants, committees, task forces, Academic Senate, etc.)

Our faculty is solely composed of part-time adjunct faculty. Our presence on the campus is limited. We are all employed full-time (+) in the health care field.

I would suggest that our effect on the campus may be indirect in that our students attend other courses as well as go on to nursing and other related programs. This supports and expands demographics.

Our faculty is not able to take part in task force or Academic Senate due to the stated time constraints.

4.4 Describe how the members of the program contribute to the community beyond the college, locally, state wide, nationally.

Please see previous discussion of State, National and local participation by staff.

4.5 Describe how decisions are made in your program.

Course content is by our Medical Directors via the Advisory Board. Campus decisions are through Rick Kirby our Coordinator and Carrie Clay of the ROP office. Our semester Curriculum Development Meeting is a staff meeting wherein we work on the implementation of those decisions.

The Dean of Professional Studies, The Dean of Student Affairs as well as the Evening Dean are contacted when any decision related to students, staff or policy.

4.6 Describe how computer resources, such as the internet, department and faculty web pages, and email are used to by faculty in the program.

Please see previous discussion on internet sources and use of "Smartcart", Web Sites.

4.7 If your program has hiring equivalencies, explain the rationale and comment on alignment with Cuyamaca College. See Appendix 11.

Hiring Equivalencies are by either 1 or 2:

- 1) A) Associate in Science Degree in Orthopedic Technology  
B) 5 years clinical experience in Orthopedic Technology  
C) Current National Certification by NBCOT  
D) California Teaching Credential, limited
- 2) A) Ten years Clinical Experience  
B) Current National Certification by NBCOT  
C) California Teaching Credential, limited

4.8 List and describe the duties of classified staff, work study, and student workers who are directly responsible to the program,.

The only staff directly responsible to our program is our lab tech. We are blessed to have the support of the Health Science Lab Staff.

- 4.9 Discuss staffing factors that influence the effectiveness of the program. Does your program need to decrease, maintain, or increase, the number of full-time faculty?

The faculty for Orthopedic Technology is composed of two part-time adjunct faculty. There is a backup faculty for coverage if needed.

## **SECTION 5 – SCHEDULING EFFECTIVENESS AND ROOM UTILIZATION**

**Refer to Appendix 7 for efficiency. Enrollment will come from Data on Demand; Appendix 5 has the sections and class sizes. Appendix 12 shows % of max.**

- 5.1 Using Appendices 7 and 8, comment on student success figures since the last program review. How does this compare to the campus-wide figures?

As stated our student's success is best demonstrated by the percentage of those who complete the course that actually go on to become employed in the field of health care. Again our number, based on a ten year review, shows that 78% of our graduates are employed in the field.

- 5.2 Analyze and comment on any trends in enrollment, numbers of sections offered, average class size and efficiency.

There have been no changes in the number of sections offered. I have attached several simple histogram charts that graphically show the basic stable nature of success and efficiency.

- 5.3 Comment on any sections that are historically under-enrolled and discuss strategies that might increase enrollment.

Enrollment is optimal and stable.

- 5.4 Comment on adequacy of facilities (e.g. does room size and configuration fit the teaching strategies? ) and equipment for meeting instructional needs.

352B is the current room allocated to our program. While we are grateful for an assigned room, the effects of a loud, dusty lab session is a concern. The treatment tables used are stacked about the border of the room. Supply cabinets have been added.

We look forward to our NEW room to be located in the future building. The plans have been altered a few times and our faculty has met with the planners. Our hope is that a dedicated space will allow us to provide the area to allow the hands-on labs and at the same time an adequate lecture room. We believe there has been progress, there are still some concerns related to storage space.

5.5 How does room availability affect your enrollment?

While the lab setting could always use a larger space, I do not believe that this affects enrollment. The ability to teach in a hands-on lab, as well as the availability of supplies are the primary limiting factors.

5.6 Discuss alternatives your program has explored including off-site offerings.

Sharp Rees-Stealy Orthopedics has agreed to allow us to carry out our summer semester didactic and demonstration sessions at their Kearny Mesa clinic site. UCSD Medical Center and V.A. Medical Center are also off site locations used by our program.

5.7 Comment on the results of the Students Survey, Appendix 6, focusing on class times and facilities.

Times:

- 77.8% prefer current evening schedule
- 22 % prefer early morning

The concept of evening classes is to allow students and staff to work full time and still have time dedicated to Orthopedic Technology. This has proven to be the best schedule.

Facilities:

- 22.2 % classrooms clean in good repair
- 61.1 % disagree
  
- 5.6 % classroom equipment maintained / up to date
- 61.1 % disagree
  
- 47.1% computer technology in classroom up to date
- 47.1% disagree



## SECTION 6 – FISCAL PROFILE

- 6.1 Using Appendix 12, Subject WSCH Analysis Report: comment on trends reflected in the column “Earned WSCH/FTE(F)” for your overall program, and for specific courses over a five year period.

WSCH data is not available for this program.

- 6.2 Using Appendix 14, Fiscal Data: Outcomes Profile: analyze and comment on Earned WSCH/FTE and Cost/FTES of the program.

WSCH data is not available for this program  
ROP fiscal data has been included for your review.

- 6.3 If the program receives any outside financial support or subsidy, list those sources and amount. Describe how the additional resources are used and how they relate to the regular college budget.

Zimmer OSP, George Clark, Brand Manager  
Royce/OSSUR, William Bull, Western Regional Manger  
Ortho-Plus, Chris Leventis, President  
EBI, Adam Owens, Regional Manager

The above listed companies provide technical teaching support and substantial amounts of materials, worth over \$20,000. The impact is on the cost for lab workshops. This is an ROP expense.

Our staff is most grateful for the outstanding, continued support from the members of our Advisory Board.

## SECTION 7 – SUMMARY

### 7.1 Summarize program strengths and weaknesses in terms of:

#### Teaching and Learning –

I strongly believe that we have developed, as instructors, a well planned, continually updated, coordinated set of lessons that are presented with a true sense of passion for the profession, for that is what we teach; a profession, our profession.

Our students have the difficult task of dealing with the intensity of the course as well as all the idiosyncrasies of 4 night classes a week. The demand is high. They are motivated by a variety of personal issues, with age and social situations acting into the mix. The re-entry adults with all the complexities of changing to a new profession, a classroom setting they are not as familiar with as they once were. The young with a deep need for a direction and money. Those who are suddenly expected to be the provider. Graduates of four year colleges with degrees that have not provided a link to a career. All of this and a cultural and economic diversity, brings them to our classroom ... to learn. Hence our passion.

#### Student access and success –

The Regional Occupation Program's efforts have, until now, provided a great effort on multiple levels from high school to career presentations on-line and television adds, as well as their established contacts with counselors. This is drawing to a close, with recent state funding cuts.

The positive is, well, the positive. Our student's success in the profession, in the community and across the country has given the Grossmont Orthopedic Technology Program a very positive reputation. We have become a national clearing house for employment. We are THE resource for well trained allied health personnel. This is a direct result of our student's efforts. We are proud of their success. Hence our passion.

#### Development of human resources –

We are very pleased to add Mr. Michael Parish to our staff. Mr. Parish graduated from our program 12 years ago. He is currently an instructor in the Boston-Reed Orthopedic Technology course here in San Diego. He is a Surgical Orthopedic Specialist for Sharp Rees-Stealy. His direct communication on a daily basis with Tom Byrne as well as his teaching experience really will be a great asset to the program.

### Fiscal Stability -

In two years we will lose ROP adult education funding from the state. Carrie Clay's effective, professional staff will be gone. Our supporters remain. As stated above the reputation of the course has made obtaining needed supplies and support very obtainable. Corporate marketing staff realize the direct link with our students becoming comfortable with their products.

Our faculty funding is as stable as can be. We have a direct, positive result on the community we teach in. We will continue to operate this program with continuing corporate and large employer support.

## SECTION 8 – CONCLUSIONS AND RECOMMENDATIONS

- 8.1 Make a rank ordered list of program recommendations. These recommendations should be clearly based on the information included in Sections 1 through 7. Do not limit recommendations to only those dealing with resources.

The Grossmont College Orthopedic Technology Program is THE premier course for the profession in this country. We are, and will remain necessary to the continuation and advancement by this profession. In 1981 I was in a conference room in Chicago, at the Headquarters for the A.M.A. We had approached them to formally establish the title of Orthopedic Technologist in their allied health listing. To do so would require two initial steps: 1) producing a written, national certification exam that met the specific requirements they provided and 2) to establish a formal education program that had both didactic and lab components with an associated externship. I accepted the task and with a core group authored the first national board exam, later taken over for a more formal editing by the newly formed National Board of Certification for Orthopedic Technologists. In 1981 the Grossmont program began. It is, and remains a key to the continued growth of this profession.

This program must continue, must succeed. This may entail a stronger involvement of the graduates who have benefited from the course. It will most assuredly require the addition of the course to the Grossmont Curriculum. We will pursue this as, failing to do so will result in the end of a great resource.

What recommendations?

We, the Orthopedic Technology profession need a formal, high quality educational base if we are to have a future. Until now Grossmont's Orthopedic Technology Program has, through the support of ROP, been just that. There is a great concern over what will occur when the financial backing of ROP is discontinued.

## APPENDICES

APPENDIX 5

**5. Grade Distribution Summary**

APPENDIX 6

**6. Results of Student Survey**

APPENDIX 7

**7. Statistical Data: Outcomes Profile**

APPENDIX 8

**8. Efficiency Report**

APPENDIX 9

**9. Degrees and Certificates Awarded**

APPENDIX 11

**11. Department Equivalencies**

APPENDIX 12

**12. Subject WSCH Analysis Report**

APPENDIX 13

**13. Fiscal Year FTES Analysis By Program Report**

## **Division: Business and Professional Studies**

### ***Department: Orthopedic Technology***

**Director or Chair:** Rick Kirby

**Program Description:** Training as an Orthopedic Technologist offers lifetime professional skills in an expanding allied health field. This program is designed to prepare graduates to perform the application, adjustment and removal of casts, splints and braces; set up and maintain traction configurations; assist in the care of the acutely injured orthopedic patient, including wound dressing, and to assist the physician in the reduction and/or manipulation of orthopedic injuries. Orthopedic Technologists are employed in hospitals, clinics or private practice offices. The program is certified by the National Board for Certification of Orthopedic Technologists (NBOCT).

#### **Activities**

**Activity #1:**

Request installation of an air filtration and vacuum system in Room 352B to address plaster dust created during the application and removal of orthopedic casts.

**Benefits:**

Protect student/staff health and safety. Prevent dust accumulation on equipment and furniture in Room 352B and adjacent rooms.

**Requirements:**

Curriculum Development?	N
Equipment?	Y
Facilities?	Y
Marketing?	N
Staffing – Classified?	N
Staffing – Faculty?	N
Staff Development?	N

**Goals and Objectives:** 5, 5.6

**Activity #2:**

Maintain and expand linkages with local medical facilities to provide clinical experience for students.

**Benefits:**

Provide clinical experience to enhance student learning and maintain the curriculum to the scope of practice.



**Requirements:**

Curriculum Development?	N
Equipment?	N
Facilities?	N
Marketing?	N
Staffing – Classified?	N
Staffing – Faculty?	N
Staff Development?	N

**Goals and Objectives: 1, 1.9**

**Activity #3:**

Maintain and expand linkages with orthopedic equipment manufacturers and supply companies.

**Benefits:**

Obtain industry support for the program.

**Requirements:**

Curriculum Development?	N
Equipment?	N
Facilities?	N
Marketing?	N
Staffing – Classified?	N
Staffing – Faculty?	N
Staff Development?	N

**Goals and Objectives: 3, 3.1**

**Activity #4:**

Maintain and increase as possible the adjunct faculty pool.

**Benefits:**

Insure continuity in the instructional program.

**Requirements:**

Curriculum Development?	N
Equipment?	N
Facilities?	N
Marketing?	N
Staffing – Classified?	N
Staffing – Faculty?	Y
Staff Development?	N

**Goals and Objectives: 4, 4.1**

Activity #5:  
none

Benefits:  
none

Requirements:  
Curriculum Development? N

Equipment?	N
Facilities?	N
Marketing?	N
Staffing – Classified?	N
Staffing – Faculty?	N
Staff Development?	N

Goals and Objectives: 0, 0

### **Additional Planning Activities**

none

### **Accomplishments**

Accomplishment #1:

The National Board for Certification of Orthopedic Technologists (NBCOT) adopted the course syllabus for the Orthopedic Technology Program at Grossmont Colle as the national standard for establishing new programs.

Goals and Objectives: 1, 1.4

Accomplishment #2:

Established clinical rotation sites with Orthomed, Inc. to expand clinical experience in private practice physician's offices for students.

Goals and Objectives: 1, 1.1

Accomplishment #3:

Obtained commitments from 3 orthopedic supply companies (BSN Orthopedics, Webcor and D.J. Orthopedic Supply) to provide consumable supplies to support the lab practicum.

Goals and Objectives: 3, 3.1

Accomplishment #4:

Recruited one adjunct faculty member to provide backup to existing staff.

Goals and Objectives: 4, 4.1

Accomplishment #5:

none

Goals and Objectives: 0, 0

Accomplishment #6:

none

Goals and Objectives: 0, 0

Accomplishment #7:

none

Goals and Objectives: 0, 0

Accomplishment #8:

none

Goals and Objectives: 0, 0

Accomplishment #9:

none

Goals and Objectives: 0, 0

Accomplishment 10:

none

Goals and Objectives: 0, 0

**Additional Accomplishments:**

none

**Orthopedic Technology  
 PROGRAM REVIEW COMMITTEE  
 SUMMARY EVALUATION**

SCHOOL YEAR	Enrollment	Total Budget	ADA Calculation	COST per ADA	COMMITTEE RECOMMENDATION
1996-97	28	\$34,402	35.20	\$1062.56	Maintain
1997-98	34	\$42,135	42.74	\$985.78	
1998-99	28	\$41,003	35.20	\$1164.86	
99-2000	30	\$42,589	37.71	\$1129.25	
2000-01	26	\$42,667	32.69	\$1305.37	

**The program review committee commends the department for:**

1. Outstanding senior instructor, Tom Byrne, who monitors the curriculum for currency, monitors supplies, recruits additional adjunct faculty, provides graduate placement service, and works closely with Rick Kirby on all administrative responsibilities. Tom Byrne is a pioneer in the field of orthopedic technology. The Grossmont College program was the first in the nation to be certified by the National Board of Certification for Orthopedic Technologists (NBCOT) in the United States as a result of the work of Professor Byrne, who has also won national, state, and local awards for his leadership and service in orthopedic technology.
2. Maintaining an extremely high student success rate (92%-100%) and high job placement rate (78%).
3. Securing donations of equipment and supplies: casting saw provided by Zimmer Patient Care (\$1,000), and consumable supplies donated by Johnson and Johnson (\$10,200).
4. Extremely high pass rate on the national certification exam (96%). The national pass rate is 67%.
5. Excellent community outreach projects involving Lincoln, Santana, and Helix High School as well as the Grossmont College Career Fair and UCSD Medical Center.

Orthopedic Technology

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**The committee offers the following recommendations:**

1. Continue to train adjunct faculty in instruction and administration of the program. Train an adjunct professor to assist Tom Byrne in the instruction and administration of the program.
2. Explore the possibilities of designing a multi-use classroom that can be effectively utilized by OT and other allied health departments.
3. Utilize the library faculty to do group bibliographic instruction for research projects.
4. Incorporate the updated ROP competencies into the GC course outlines.
5. Establish ties with the counseling department so that counselors are better informed about the program and its career ladder.
6. Expand the clinical affiliates to involve private practice offices and clinics.

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College President

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Academic Program Review Chair

GROSSMONT COLLEGE

Official Course Outline

ORTHOPEDIC TECHNOLOGY 110 – ORTHOPEDIC ANATOMY AND PHYSIOLOGY

<u>1. Course Number</u>	<u>Course Title</u>	<u>Semester Units</u>	<u>Hours</u>
OT 110	Orthopedic Anatomy and Physiology	5	5 hours lecture

2. Course Prerequisites

A "C" grade or higher in Biology 140 or 144 or equivalent.

Corequisite

Concurrent enrollment in OT 111.

Recommended Preparation

None.

3. Catalog Description

A study of the development of the muscular-skeletal systems with the emphasis divided between gross anatomy, the cellular detail (histology) of tissues, arterial and venous perfusion, as well as relevant nervous innervation of these systems, as they relate to the treatment of orthopedic injuries.

4. Course Objectives

The student will:

- Define prescribed medical terminology in accordance with criteria established by the text and the instructor.
- Identify the components and physiologic interrelationships of the human skeletal system.
- Compare and contrast the relationships of specified components of the skeletal and muscular systems of the human body.
- State and evaluate the physiologic principles involved with the repair of muscle injury.
- State the relationship of perfusion to skeletal muscle function.
- Identify and contrast the functions of the nerves of the upper and lower extremities as related to orthopedic injury and treatment.
- Describe the process of bone development and healing following orthopedic injury.
- Describe and define the process leading to specified

5. Instructional Facilities

- Standard classroom.
- Special aids: human skeleton

6. Special Materials Required of Student

Tape recorder (recommended).

7. Course Content

This course will concentrate on medical terminology and the anatomy, physiology and pathophysiology of the human skeletal and muscular systems as they relate to the practice of orthopedic medicine. Emphasis will be placed on the relationships between bones, joints, muscles and nerves and the theoretical concepts related to the treatment of orthopedic injury.

8. Method of Instruction

- a. Lecture.
- b. Class discussion.
- c. Audiovisual presentations.
- d. Reading assignments.

9. Methods of Evaluating Student Performance

- a. Written exams.
- b. Research paper.
- c. Comprehensive written final examination.

10. Outside Class Assignments

- a. Periodic homework assignments.
- b. Specified readings.

11. Texts

- a. Required Text(s):
  - (1) Blauvelt, N. and Fred Nelson, M.D. Manual of Orthopedic Terminology. 6<sup>th</sup> edition. St. Louis, Missouri: Mosby Publishers, 1998.
  - (2) Netter, Frank A., M.D., Ph.D. Netter's Concise Atlas of Orthopedic Anatomy. St. Louis, Missouri: Elsevier Health Sciences, 2002.
  - (3) Hoppenfeld, A. Physical Examination of the Spine and Extremities. Cambridge, UK: Pearson Publishing Company, 2006.
  - (4) Netter, Frank A., M.D., Ph.D. The Ciba Collection, Volume VIII, Part 1 and 3, The Musculoskeletal Systems. St. Louis, Missouri: Elsevier Health Sciences, 1999.
- b. Supplementary texts and workbooks:  
Class handout material supplied by the instructor.

Date approved by the Governing Board: April 18, 2006

GROSSMONT COLLEGE

Official Course Outline

ORTHOPEDIC TECHNOLOGY 111 - ORTHOPEDIC TECHNIQUES I

<u>1. Course Number</u>	<u>Course Title</u>	<u>Semester Units</u>	<u>Hours</u>
OT 111	Orthopedic Techniques I	4	1 hour lecture 6 hours laboratory

2. Course Prerequisites

A "C" grade or higher in Biology 140 or 144 or equivalent.

Corequisite

Concurrent enrollment in OT 110.

Recommended Preparation

None.

3. Catalog Description

An introduction to cast room protocols, including instrumentation, the techniques for the application of the basic types of casts and the special considerations required for treatment of orthopedic trauma cases. The course will include application of orthopedic casts in the laboratory setting.

4. Course Objectives

The student will:

- Describe and differentiate prescribed cast room protocols required for the treatment of routine and major trauma types of orthopedic cases in accordance with criteria established by the instructor and local hospital policy.
- Describe and demonstrate the technique for limb immobilization in the treatment of orthopedic injury in accordance with criteria established by the instructor and course text.
- Evaluate various types of orthopedic injuries and apply the appropriate type of orthopedic cast in accordance with criteria established by the instructor and the course text.
- Describe, evaluate, and correct common problems associated with the application of orthopedic casts with regard to injury healing and patient comfort in accordance with criteria established by the instructor and current clinical practice.

5. Instructional Facilities

- Standard classroom.
- Laboratory equipped with casting tables and orthopedic supplies.

6. Special Materials Required of Student

Lab coat or suitable protective clothing (apron, etc.).



7. Course Content

This course will introduce the standard cast room protocols used in the treatment of orthopedic injuries. Emphasis will be on acquisition of clinical skills in aseptic technique, injury immobilization procedures, the application of the six basic types of orthopedic casts, and special considerations required for treatment of major orthopedic trauma cases. Students will apply orthopedic casts in the laboratory.

8. Method of Instruction

- a. Lecture.
- b. Class discussion.
- c. Audiovisual presentations.
- d. Instructor demonstration.
- e. Clinical application.

9. Methods of Evaluating Student Performance

- a. Written examinations.
- b. Clinical performance tests in cast application techniques.
- d. Compressive written final examination.

10. Outside Class Assignments

- a. Assigned reading.
- b. Periodic homework.

11. Texts

- a. Required Text(s):
  - (1) Iverson, Larry D., M.D. and Kay Lawson, M.D. Manual of Acute Orthopedic Therapeutics. 2nd edition. Boston, MA: Little, Brown and Company, 1985.
- b. Supplementary texts and workbooks:
  - (1) Class handouts supplied by the instructor.

Date approved by the Governing Board: 6/98

GROSSMONT COLLEGE

Official Course Outline

ORTHOPEDIC TECHNOLOGY 210 - ADVANCED ORTHOPEDIC ANATOMY AND PHYSIOLOGY

<u>1. Course Number</u>	<u>Course Title</u>	<u>Semester Units</u>	<u>Hours</u>
OT 210	Advanced Orthopedic Anatomy and Physiology	5	5 hours lecture

2. Course Prerequisites

A "C" grade or higher in OT 110 and 111 or equivalent.

Corequisite

Concurrent enrollment in OT 211 and 212.

Recommended Preparation

None.

3. Catalog Description

This course provides advanced instruction in a systems approach to the evaluation and treatment of specified orthopedic injuries and disease. Topics include the development, function and interrelationships of the muscular and skeletal systems with emphasis on gross anatomy, cellular structure, vascular perfusion, neural innervation, and congenital and acquired orthopedic pathophysiology.

4. Course Objectives

The student will:

- Describe the process of bone remodeling following orthopedic injury in accordance with criteria established by the instructor and course text.
- Describe the physiologic process involved in the repair of a simple fracture of a long bone in accordance with criteria established by the instructor and course texts.
- Compare the physiologic processes leading to complications in the treatment of orthopedic injuries and disease in accordance with criteria established by the instructor and course text.
- Compare the symptoms and clinical findings in prescribed diseases of the joints in accordance with criteria established by the instructor and course texts.
- Distinguish the symptoms and clinical findings of the four common types of bone tumors in accordance with criteria established by the instructor and course text.

5. Instructional Facilities

- Standard classroom.
- Special aids: human skeleton.

6. Special Materials Required of Student

Tape recorder (recommended).

7. Course Content

This course is designed for students enrolled in the Orthopedic Technology Program and will concentrate on advanced concepts associated with the diagnosis and treatment of orthopedic injury and disease. The instruction is designed to prepare the student to recognize and differentiate between various forms of orthopedic pathophysiology and participate in designing clinical treatment plans.

8. Method of Instruction

- a. Lecture.
- b. Class discussion.
- c. Audiovisual presentations.

9. Methods of Evaluating Student Performance

- a. Written exams.
- b. Research paper.
- c. Comprehensive written final examination.

10. Outside Class Assignments

- a. Periodic homework assignments.
- b. Specified readings.

11. Texts

- a. Required Text(s):
  - (1) Blauvelt, N. and Fred Nelson, M.D. Manual of Orthopedic Terminology. 5th edition. St. Louis, MO: Mosby Publishers, 1994.
  - (2) Dandy, D. Essentials of Orthopedic Trauma. Naperville, ILL: Churchill Publishing Company, 1993.
  - (3) Hoppenfeld, A. Physical Examination of the Spine and Extremities. Old Tappan, NJ: Prentice Hall Publishing Company, 1976.
  - (4) Netter, Frank A., M.D., Ph.D. The Ciba Collection, Volume VIII, Part 1 and 3, The Musculoskeletal Systems. Newark, NJ: Ciba Medical Publications, 1987.
- b. Supplementary texts and workbooks:
  - (1) Class handout material supplied by the instructor.

Date approved by the Governing Board: 6/98

GROSSMONT COLLEGE

Official Course Outline

ORTHOPEDIC TECHNOLOGY 211 - ORTHOPEDIC TECHNIQUES II

<u>1. Course Number</u>	<u>Course Title</u>	<u>Semester Units</u>	<u>Hours</u>
OT 211	Orthopedic Techniques II	4	2 hours lecture 6 hours laboratory

2. Course Prerequisites

A "C" grade or higher in OT 110 and 111.

Corequisite

Concurrent enrollment in OT 210 and 212.

Recommended Preparation

None.

3. Catalog Description

This course is a continuation of OT 111 with emphasis on advanced cast room protocols, instrumentation, orthopedic casting techniques and the assessment and treatment of casting complications. Emphasis will be on the application of special casts, pediatric casts, full-body casts and various traction configurations and techniques.

4. Course Objectives

The student will:

- Describe the clinical findings of specified examples of complex orthopedic trauma in accordance with criteria specified by the instructor and course text.
- Assess various types of orthopedic injuries and design appropriate treatment strategies in accordance with criteria specified by the instructor and course text.
- Evaluate various types of orthopedic injury and formulate appropriate traction configurations in accordance with criteria established by the instructor and course text.
- Distinguish potential clinical complications associated with the application of specified orthopedic casts and the technique for their correction in accordance with criteria specified by the instructor.
- Apply specified orthopedic casts in the laboratory setting in accordance with criteria specified by the instructor.

5. Instructional Facilities

- Standard classroom.
- Clinical laboratory with casting tables and orthopedic supplies.

6. Special Materials Required of Student

Lab coat or other protective clothing (apron).

7. Course Content

This course will present advanced instruction on the planning, evaluation and set up of various traction configurations, the application of special categories of orthopedic casts and the role of the Orthopedic Technologist in the clinical management of complex orthopedic trauma.

8. Method of Instruction

- a. Lecture.
- b. Class discussion.
- c. Audiovisual presentations
- d. Instructor demonstration.
- e. Student clinical application.

9. Methods of Evaluating Student Performance

- a. Written examinations.
- b. Clinical performance tests.
- c. Comprehensive written final examination.

10. Outside Class Assignments

- a. Periodic homework assignments.
- b. Assigned reading.

11. Texts

- a. Required Text(s):
  - (1) Iverson, Larry D., M.D. and Kay Lawson, M.D. Manual of Acute Orthopedic Therapeutics. 2nd edition. Boston, MA: Little, Brown and Company, 1985.
- b. Supplementary texts and workbooks:
  - (1) Class handouts supplied by the instructor.

Date approved by the Governing Board: 6/98

GROSSMONT COLLEGE

Official Course Outline

ORTHOPEDIC TECHNOLOGY 212 - SUPERVISED HOSPITAL CLINICAL PRACTICUM I

<u>1. Course Number</u>	<u>Course Title</u>	<u>Semester Units</u>	<u>Hours</u>
OT 212	Supervised Hospital Clinical Practicum I	2	6 hours laboratory

2. Course Prerequisites

A "C" grade or higher in OT 110 and 111.

Corequisite

Concurrent enrollment in OT 210 and 211.

Recommended Preparation

None.

3. Catalog Description

This course is designed to provide clinical application of orthopedic technology in a hospital environment. Students participate in the normal day-to-day activities of an orthopedic service where they develop and refine their skills in the application of orthopedic casts, set up and application of traction devices and the pre and post operative care of the orthopedic patient. The student is required to demonstrate clinical orthopedic competencies as part of this course.

4. Course Objectives

The student will:

- a. Display appropriate professional conduct in the clinical environment in accordance with criteria established by the instructor and hospital standing policies.
- b. Evaluate various orthopedic injuries and disease states and design appropriate treatment plans in accordance with criteria established by the instructor and course text.
- c. Demonstrate proficiency in the application of splints, casts, traction devices and surgical dressings for the treatment of orthopedic injury and disease in accordance with criteria established by the instructor and departmental policy.
- d. Record pertinent clinical information into patient charts or records in accordance with criteria established by the instructor and departmental policy.
- e. Provide pre and post operative care for orthopedic surgical patients in accordance with criteria established by the instructor and hospital policy.

5. Instructional Facilities

- a. Standard classroom.
- b. Hospital orthopedic service including a cast room and surgical suites.

6. Special Materials Required of Student

- a. Student lab coat.
- b. Student name tag.
- c. Student ID patch.
- d. Medical malpractice insurance.

7. Course Content

This course will emphasize the clinical application of orthopedic techniques in the hospital environment. Topics include the professional expectations of the Orthopedic Technologist, the application of routine and complex splints, casts, braces, traction configurations and the care of the orthopedic surgical patient.

8. Method of Instruction

- a. Clinical observation.
- b. Instructor demonstration.
- c. Clinical application of orthopedic techniques.

9. Methods of Evaluating Student Performance

- a. Case reports.
- b. Clinical performance tests.
- c. Comprehensive written final.

10. Outside Class Assignments

- a. Assigned reading.
- b. Periodic homework.

11. Texts

- a. Required Text(s):
  - (1) Iverson, Larry D., M.D. and Kay Lawson, M.D. Manual of Acute Orthopedic Therapeutics. 2nd edition. Boston, MA: Little, Brown and Company, 1985.
- b. Supplementary texts and workbooks:
  - (1) Schneider, Franz Richard, M.D. Handbook for the Orthopedic Assistant. St. Louis, MO: Mosby, 1976.
  - (2) Wilson, Frank C. The Musculoskeletal System, Basic Procedures and Disorders. Philadelphia, PA: Lippincott, 1975.

Date approved by the Governing Board: 6/98

GROSSMONT COLLEGE

Official Course Outline

ORTHOPEDIC TECHNOLOGY 214 - SUPERVISED HOSPITAL CLINICAL PRACTICUM II

<u>1. Course Number</u>	<u>Course Title</u>	<u>Semester Units</u>	<u>Hours</u>
OT 214	Supervised Hospital Clinical Practicum II	4	12 hours laboratory

2. Course Prerequisites

A "C" grade or higher in OT 210, 211 and 212.

Recommended Preparation

None.

3. Catalog Description

This course is a continuation of OT 212 and is designed to teach the clinical application of orthopedic techniques in the clinical environment. Students will apply casts, assist in the reduction of fractures, apply and maintain traction configurations and devices, apply total body casts, and assist the orthopedic surgeon in minor and major surgical procedures.

4. Course Objectives

The student will:

- a. Assess orthopedic injury and apply appropriate casts in accordance with criteria established by the instructor and the attending physician.
- b. Measure and record routine patient vital signs in accordance with criteria established by the instructor and hospital practice.
- c. Assess the clinical requirements for, and apply special casting braces in accordance with criteria established by the instructor and the attending physician.
- d. Demonstrate aseptic technique in the care of the orthopedic patient in accordance with criteria established by the instructor and hospital policy.
- e. Assist the physician in the surgical reduction and treatment of fractures in accordance with criteria established by the instructor, the physician and hospital policy.

5. Instructional Facilities

- a. Standard classroom.
- b. Orthopedic cast room.
- c. Hospital operating room suite.

6. Special Materials Required of Student

- a. Student lab coat with student patch.
- b. Student name tag.
- c. Clinical notebook.



7. Course Content

This course will provide clinical application of orthopedic techniques required in the assessment of types of fractures, and the indications and contraindications for various types of casts. Specific areas of instruction include adult and pediatric spika casts, body jackets, hand dressings, Halo brace application techniques, the Minerva jacket, and the Queen Ann cast. Instruction is also included in the design, set up and maintenance of specified traction configurations and devices, and the techniques for assisting the physician during orthopedic surgical procedures.

8. Method of Instruction

- a. Observation.
- b. Instructor demonstration.
- c. Clinical application.

9. Methods of Evaluating Student Performance

- a. Clinical observation.
- b. Clinical performance tests.
- c. Term paper.
- d. Comprehensive written final exam.

10. Outside Class Assignments

- a. Period homework assignments.
- b. Specified readings.

11. Texts

- a. Required Text(s):
  - (1) Iverson, Larry D., M.D. and Kay Lawson, M.D. Manual of Acute Orthopedic Therapeutics. 2nd edition. Boston, MA: Little, Brown and Company, 1985.
- b. Supplementary texts and workbooks:
  - (1) Enneking, W.F. Physical Diagnosis of the Musculoskeletal System. S.L., S.N.: Shorter Printing, 1969.
  - (2) Scheider, Franz Richard, M.D. Handbook for the Orthopedic Assistant. St. Louis, MO: Mosby, 1976.
  - (3) Wilson, Frank C. The Musculoskeletal System, Basic Procedures and Disorders. Philadelphia, PA: Lippincott, 1975.

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	TOTAL		TOTAL WSCH	INSTRUCTOR	PT
											W	ENR			
OT 110 ORTHOPEDIC ANATOMY & PHYS											1	19	0.0	BYRNE	PT
6475N** COURSE TOTAL			17	1									0.0		
OT 111 ORTHOPEDIC TECHNIQUES I											1	19	0.0	RICE	PT
6478N** COURSE TOTAL			15	2	1								0.0		
SUBJECT TOTAL													0.0		

\*\* CLASS NOT VALID FOR A.D.A -- NOTED ONLY (NOT INCLUDED IN TOTALS)

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL	TOTAL	INSTRUCTOR	
											ENR	WSCH		
OT 210	ADV	ORTHOPEDIC ANATOMY & PHYS									20	0.0	BYRNE	PT
6020N**												0.0		
											20	0.0	RICE	PT
OT 211	ORTHOPEDIC TECHNIQUES II										20	0.0	RICE	PT
6022N**												0.0		
											20	0.0	BYRNE	PT
OT 212	SUPV HOSP CLINICAL PRACTICUM I										19	0.0	BYRNE	PT
6025**												0.0		
											19	0.0	BYRNE	PT
	SUBJECT TOTAL											0.0		

\*\* CLASS NOT VALID FOR A.D.A -- NOTED ONLY (NOT INCLUDED IN TOTALS)

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

COURSE	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL		INSTRUCTOR	PT
												ENR	WSCH		
OT 110											1	15	0.0	BYRNE	PT
6475N**		0.0	14										0.0		
COURSE TOTAL															
OT 111											1	15	0.0	RICE	PT
6478N**		0.0	13	1									0.0		
COURSE TOTAL															
SUBJECT TOTAL															0.0

\*\* CLASS NOT VALID FOR A.D.A -- NOTED ONLY (NOT INCLUDED IN TOTALS)

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL	TOTAL	INSTRUCTOR	
												ENR	WSCH		
OT 210 ADV ORTHOPEDIC ANATOMY & PHYS												19	0.0	BYRNE	PT
6735N**		0.0	16	3									0.0		
COURSE TOTAL												19	0.0	BYRNE	PT
OT 211 ORTHOPEDIC TECHNIQUES II												19	0.0	RICE	PT
6737N**		0.0	13	3	3								0.0		
COURSE TOTAL												19	0.0	BYRNE	PT
OT 212 SUPV HOSP CLINICAL PRACTICUM 1												19	0.0	BYRNE	PT
6739**		0.0	16		3								0.0		
COURSE TOTAL												19	0.0	BYRNE	PT
SUBJECT TOTAL												19	0.0		

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BUSINESS AND PROFESSIONAL STUDIES  
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BUSINESS AND PROFESSIONAL STUDIES  
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S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL		INSTRUCTOR
											ENR	WSCH	
OT 110											11	0.0	BYRNE
6475N**	0.0	9	1			1						0.0	
COURSE TOTAL													
OT 111											2	0.0	RICE
6478N**	0.0	2	7									0.0	
COURSE TOTAL													
SUBJECT TOTAL													

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BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL	TOTAL	INSTRUCTOR	
												ENR	WSCH		
OT 210 ADV ORTHOPEDIC ANATOMY & PHYS							1					13	0.0	BYRNE	PT
6735N**		0.0	12										0.0		
COURSE TOTAL															
OT 211 ORTHOPEDIC TECHNIQUES II			8	3	1		1					13	0.0	RICE	PT
6737N**		0.0											0.0		
COURSE TOTAL															
OT 212 SUPV HOSP CLINICAL PRACTICUM 1			12				1					13	0.0	BYRNE	PT
6739**		0.0											0.0		
COURSE TOTAL															
SUBJECT TOTAL															

\*\* CLASS NOT VALID FOR A.D.A -- NOTED ONLY (NOT INCLUDED IN TOTALS)

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T. WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL	TOTAL	INSTRUCTOR	PT	
												ENR	WSCH			
OT 110							3					1	21	0.0	BYRNE	PT
6475N**		0.0	17									1	21	0.0		
COURSE TOTAL												1	21	0.0		
OT 111												1	21	0.0	RICE	PT
6478N**		0.0	7	8	1			4				1	21	0.0		
COURSE TOTAL												1	21	0.0		
SUBJECT TOTAL												1	21	0.0		

\*\* CLASS NOT VALID FOR A.D.A -- NOTED ONLY (NOT INCLUDED IN TOTALS)



BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T.	WKS	HRS	A	B	C	D	F	I	CR	NC	W	TOTAL ENR	TOTAL WSCH	INSTRUCTOR	
OT 210	ADV ORTHOPEDIC ANATOMY & PHYS												10	0.0	BYRNE	PT
6735N**			0.0	10										0.0		
	COURSE TOTAL												10	0.0	BYRNE	PT
OT 211	ORTHOPEDIC TECHNIQUES II												10	0.0	RICE	PT
6737N**			0.0	2	6	2								0.0		
	COURSE TOTAL												10	0.0	BYRNE	PT
OT 212	SUPV HOSP CLINICAL PRACTICUM 1												6	0.0	BYRNE	PT
6739**			0.0	6	2	2								0.0		
	COURSE TOTAL												6	0.0	BYRNE	PT
	SUBJECT TOTAL															

\*\* CLASS NOT VALID FOR A.D.A -- NOTED ONLY (NOT INCLUDED IN TOTALS)

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T.							TOTAL ENR	TOTAL WSCH	INSTRUCTOR		
	WKS	HRS	A	B	C	D	F					I
OT 210												
6735N**		0.0	14	3				17	0.0	BYRNE		PT
COURSE TOTAL									0.0			
OT 211												
6737N**		0.0	8	5	2			15	0.0	RICE		PT
COURSE TOTAL									0.0			
OT 212												
6739**		0.0	8	4	5			17	0.0	BYRNE		PT
COURSE TOTAL									0.0			
SUBJECT TOTAL									0.0			

\*\* CLASS NOT VALID FOR A.D.A -- NOTED ONLY (NOT INCLUDED IN TOTALS)

BUSINESS AND PROFESSIONAL STUDIES

BUSINESS AND PROFESSIONAL STUDIES

	S.T.											TOTAL ENR	TOTAL WSCH	INSTRUCTOR				
	WKS	HRS	A	B	C	D	F	I	CR	NC	W							
OT 210																		
6735N**																		
COURSE TOTAL			14	3											17	0.0	BYRNE	PT
OT 211																		
6737N**																		
COURSE TOTAL			8	5	2										15	0.0	RICE	PT
OT 212																		
6739 **																		
COURSE TOTAL			8	4	5										17	0.0	BYRNE	PT
SUBJECT TOTAL																0.0		

\*\* CLASS NOT VALID FOR A.D.A -- NOTED ONLY (NOT INCLUDED IN TOTALS)

# Grossmont College Orthopedic Technology Student Survey Spring 2007 =18

1. How many courses have you taken in this subject area at Grossmont College? (Including this current course and any repeated courses)

	Frequency	Percent
Two	1	5.6
Three	3	16.7
More than three	14	77.8
<b>Total</b>	<b>18</b>	<b>100.0</b>

2. Is your major in this department?

	Frequency	Percent
Yes	16	94.1
Undecided	1	5.9
<b>Total</b>	<b>17</b>	<b>100.0</b>
No Response	1	
<b>Total</b>	<b>18</b>	

3. How did you find out about this class? (mark all that apply)

	Frequency	Percent
Class schedule/ College catalog	7	38.9
Friend or family member	7	38.9
Grossmont College Instructor	2	11.1
Grossmont webpage (online)	2	11.1
Grossmont College Counselor	1	5.6
Work referral	1	5.6

\*Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentage is based on the total number of students responding to this item (i.e., 18).

4. What is your reason(s) for taking this class? (mark all that apply)

	Frequency	Percent
Improve job skills	15	83.3
Would like a major in a related field	3	16.7
Required for major	2	11.1
General interest	1	5.6
Other	2	11.1

Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentages are based on the total number of students responding to this item (i.e., 18).

4t. What is your reason(s) for taking this class? (other)

	Frequency
For experience	1
To get a job	1

5. Which of the following helped you learn the course material best? (select all that apply)

	Frequency	Percent
Handouts	15	83.3
Lecture	13	72.2
Computer lab	12	66.7
Instructor/Class notes	8	44.4
Class discussion	7	38.9
Textbook	7	38.9
Quizzes	5	27.8
Slides, transparencies	5	27.8
Video/DVDs	5	27.8
Group work in class	4	22.2
Study groups	3	16.7
Meeting(s) with instructor	1	5.6
Online discussion boards	1	5.6
Other	1	5.6

Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentages are based on the total number of students responding to this item (i.e., 18).

5t. Which of the following helped you learn the course material best? (other)

	Frequency
Clinic	1

6a. Please indicate your level of agreement with the following statements  
(The classrooms for this program are clean and in good repair):

	Frequency	Percent
Agree	4	22.2
Neutral	1	5.6
Disagree	11	61.1
Strongly disagree	2	11.1
<b>Total</b>	<b>18</b>	<b>100.0</b>

6b. Please indicate your level of agreement with the following statements (The classroom equipment is maintained and up-to-date):

	Frequency	Percent
Agree	1	5.6
Neutral	3	16.7
Disagree	5	27.8
Strongly disagree	9	50.0
<b>Total</b>	<b>18</b>	<b>100.0</b>

6c. Please indicate your level of agreement with the following statements  
(The computer technology used in the classroom is up-to-date):

	Frequency	Percent
Agree	8	47.1
Neutral	8	47.1
Disagree	1	5.9
<b>Total</b>	<b>17</b>	<b>100.0</b>
Don't know	1	
<b>Total</b>	<b>18</b>	

6d. Please indicate your level of agreement with the following statements  
(Textbooks for this class were available in the bookstore when needed):

	Frequency	Percent
Strongly Agree	11	64.7
Agree	6	35.3
Total	17	100.0
Don't know	1	
Total	18	

7. How satisfied are you with the availability of courses in this department?

	Frequency	Percent
Very satisfied	9	50.0
Satisfied	7	38.9
Neutral	2	11.1
Total	18	100.0

8a. What would be your preferred start time(s) for courses to be offered in this subject area? Weekdays

	Frequency	Percent
Evening: Mon.-Thurs. (4pm-9pm)	14	77.8
Early Morning (7am-8am)	4	22.2

Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentages are based on the total number of students responding to this item (i.e., 18).

8b. What would be your preferred start time(s) for courses to be offered in this subject area? Saturdays

	Frequency	Percent
Would not attend on Saturdays	12	70.6
Evening (4pm-9pm)	1	5.9
Morning/Afternoon (9am-3pm)	1	5.9
No Preference	1	5.9

Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentages are based on the total number of students responding to this item (i.e., 17).

8c. What would be your preferred start time(s) for courses to be offered in this subject area? Sundays

	Frequency	Percent
Would not attend on Sundays	14	82.4

Note: Since respondents are able to select more than one option, the total percent may not equal 100. Percentages are based on the total number of students responding to this item (i.e., 17).

9a. Please indicate how often you use each of the following campus resources: (Assessment & Testing Center)

	Frequency	Percent
Rarely: 1-2 times per sem.	3	23.1
Never	10	76.9
Total	13	100.0
No Response	2	
N/A	3	
Total	18	

9b. Please indicate how often you use each of the following campus resources: (Career Center)

	Frequency	Percent
Rarely: 1-2 times per sem.	7	63.6
Never	4	36.4
<b>Total</b>	<b>11</b>	<b>100.0</b>
No Response	4	
N/A	3	
<b>Total</b>	<b>18</b>	

9c. Please indicate how often you use each of the following campus resources: (Counseling Office)

	Frequency	Percent
Sometimes: once per week	2	14.3
Rarely: 1-2 times per sem.	11	78.6
Never	1	7.1
<b>Total</b>	<b>14</b>	<b>100.0</b>
No Response	3	
N/A	1	
<b>Total</b>	<b>18</b>	

9d. Please indicate how often you use each of the following campus resources: (English Writing Center)

	Frequency	Percent
Sometimes: once per week	1	7.7
Rarely: 1-2 times per sem.	5	38.5
Never	7	53.8
<b>Total</b>	<b>13</b>	<b>100.0</b>
No Response	3	
N/A	2	
<b>Total</b>	<b>18</b>	

9e. Please indicate how often you use each of the following campus resources: (English Reading Center)

	Frequency	Percent
Rarely: 1-2 times per sem.	3	23.1
Never	10	76.9
<b>Total</b>	<b>13</b>	<b>100.0</b>
No Response	3	
N/A	2	
<b>Total</b>	<b>18</b>	

9f. Please indicate how often you use each of the following campus resources: (Health Services)

	Frequency	Percent
Rarely: 1-2 times per sem.	7	50.0
Never	7	50.0
<b>Total</b>	<b>14</b>	<b>100.0</b>
No Response	3	
N/A	1	
<b>Total</b>	<b>18</b>	

9g. Please indicate how often you use each of the following campus resources: (LRC: Computer Lab [SETL])

	Frequency	Percent
Often: 2-4 times per week.	4	22.2
Sometimes: once per week	8	44.4
Rarely: 1-2 times per sem.	5	27.8
Never	1	5.6
<b>Total</b>	<b>18</b>	<b>100.0</b>

9h. Please indicate how often you use each of the following campus resources: (LRC: Instructional Media [video carrels])

	Frequency	Percent
Sometimes: once per week	1	7.7
Rarely: 1-2 times per sem.	6	46.2
Never	6	46.2
<b>Total</b>	<b>13</b>	<b>100.0</b>
No Response	2	
N/A	3	
<b>Total</b>	<b>18</b>	

9i. Please indicate how often you use each of the following campus resources: (LRC: Main Library)

	Frequency	Percent
Often: 2-4 times per week.	3	17.6
Sometimes: once per week	9	52.9
Rarely: 1-2 times per sem.	4	23.5
Never	1	5.9
<b>Total</b>	<b>17</b>	<b>100.0</b>
No Response	1	
<b>Total</b>	<b>18</b>	

9j. Please indicate how often you use each of the following campus resources: (Math Study Center)

	Frequency	Percent
Rarely: 1-2 times per sem.	3	25.0
Never	9	75.0
<b>Total</b>	<b>12</b>	<b>100.0</b>
No Response	4	
N/A	2	
<b>Total</b>	<b>18</b>	

9k. Please indicate how often you use each of the following campus resources: (Student Affairs Office)

	Frequency	Percent
Rarely: 1-2 times per sem.	2	14.3
Never	12	85.7
<b>Total</b>	<b>14</b>	<b>100.0</b>
No Response	2	
N/A	2	
<b>Total</b>	<b>18</b>	



9. Please indicate how often you use each of the following campus resources: (Tutoring Center)

	Frequency	Percent
Sometimes: once per week	2	13.3
Rarely: 1-2 times per sem.	1	6.7
Never	12	80.0
<b>Total</b>	<b>15</b>	<b>100.0</b>
No Response	2	
N/A	1	
<b>Total</b>	<b>18</b>	

10. Gender:

	Frequency	Percent
Female	12	100.0
Male	6	
<b>Total</b>	<b>18</b>	

11. Age:

	Frequency	Percent
Under 20	1	5.6
20-24	8	44.4
25-29	4	22.2
30-49	4	22.2
50 or older	1	5.6
<b>Total</b>	<b>18</b>	<b>100.0</b>

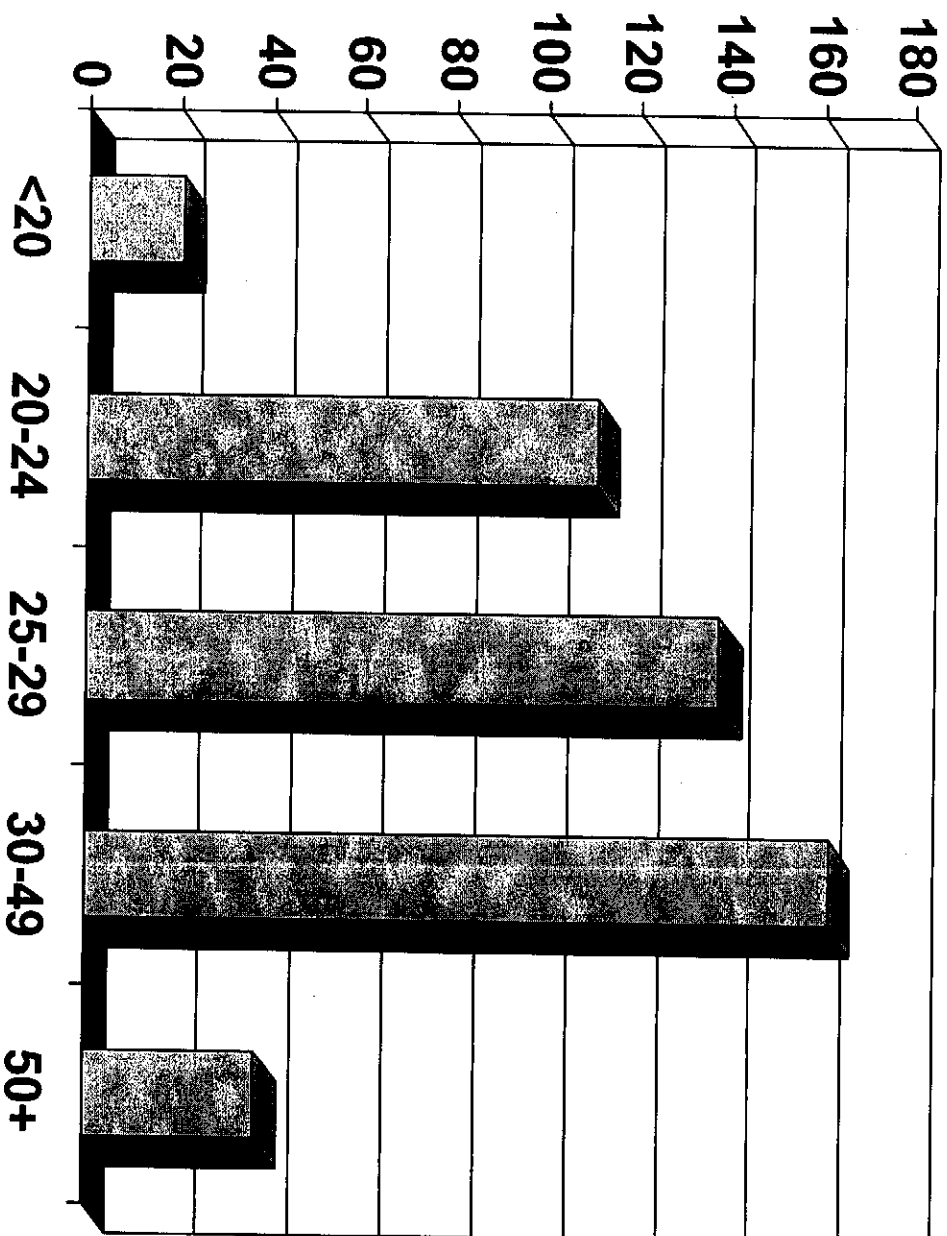
2. Ethnicity (mark one):

	Frequency	Percent
White, Non-Hispanic and not of Middle Eastern decent	11	61.1
Filipino	3	16.7
Black	2	11.1
Asian	1	5.6
Hispanic	1	5.6
<b>Total</b>	<b>18</b>	<b>100.0</b>

13. Primary language (mark one):

	Frequency	Percent	Cumulative Percent
Valid English	17	94.4	94.4
Japanese	1	5.6	100.0
<b>Total</b>	<b>18</b>	<b>100.0</b>	

# Orthopedic Technology Number by Age



Years 2002 thru 2007

Enrollment by Age

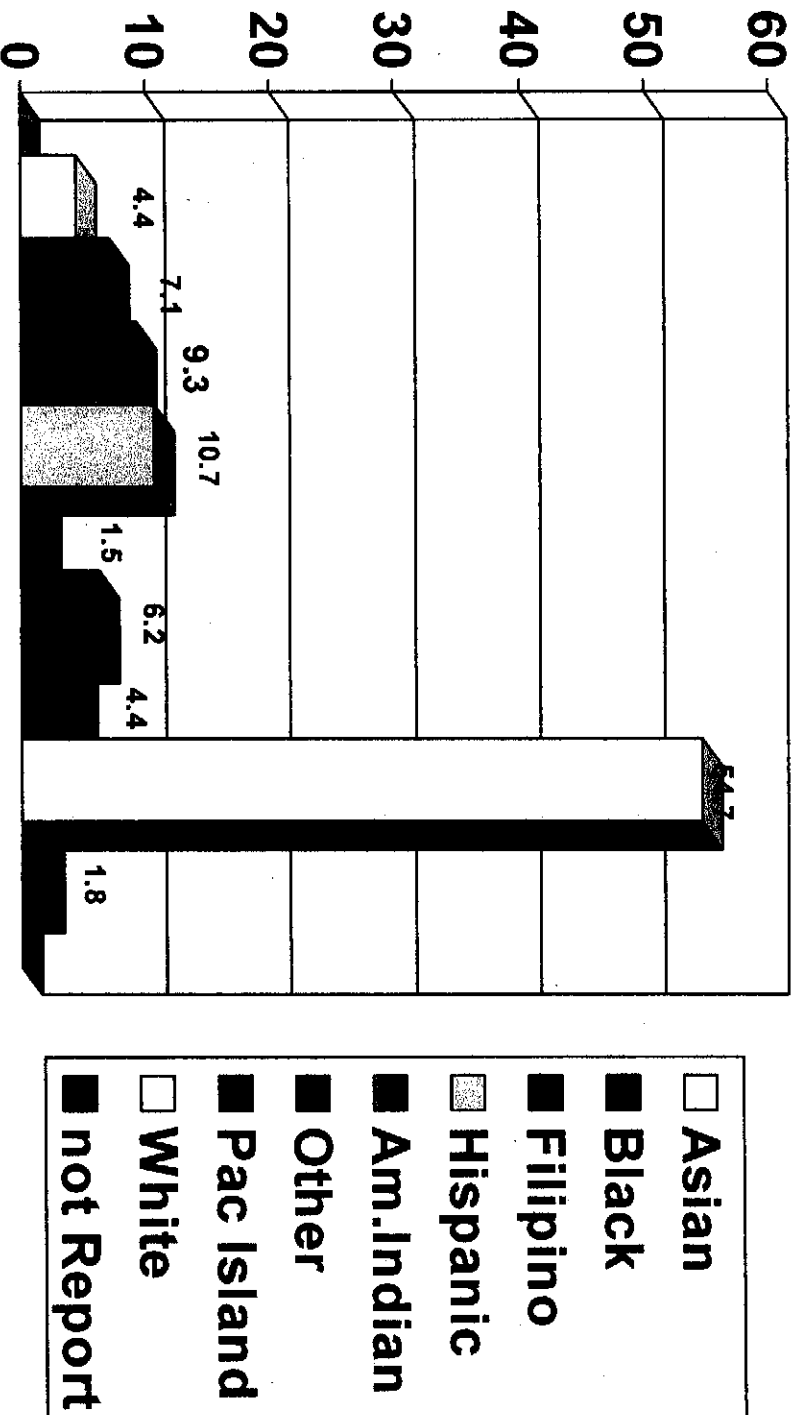
Gender:

Ethnicity:

Course Number:

	Age ↻	Year/Semester ↻	N ↻	% of N in Age
Students ↻	Less than 20	2002 - Fall	2	5.3%
		2006 - Spring	2	4.1%
		2006 - Fall	6	13.0%
		2007 - Spring	3	6.4%
		Total	13	2.8%
	20-24	2002 - Summer	4	23.5%
		2002 - Fall	8	21.1%
		2003 - Spring	15	26.3%
		2003 - Summer	2	14.3%
		2003 - Fall	4	13.3%
		2004 - Spring	9	23.1%
		2004 - Summer	3	21.4%
		2004 - Fall	6	27.3%
	25-29	2002 - Fall	5	26.3%
		2003 - Fall	7	46.7%
		2005 - Fall	10	47.6%
		2006 - Fall	4	17.4%
		Total	26	29.2%
	30-49	2002 - Fall	7	36.8%
		2003 - Fall	4	26.7%
		2004 - Fall	6	54.5%
		2005 - Fall	7	33.3%
		2006 - Fall	8	34.8%
		Total	32	36.0%
	50 or more	2002 - Fall	2	10.5%
		2003 - Fall	2	13.3%
		2004 - Fall	2	18.2%
		Total	6	6.7%
	Total	2002 - Fall	19	100.0%
2003 - Fall		15	100.0%	
2004 - Fall		11	100.0%	
2005 - Fall		21	100.0%	
2006 - Fall		23	100.0%	
Total		89	100.0%	

# Orthopedic Technology Enrollment by Ethnicity



Percent Total Enrollment 2002 - 2007

**Unduplicated Headcount by Ethnicity**

Gender: 

Total
-------

Age: 

Total
-------

Year/Semester: 

Total
-------

	Ethnicity	N	% of N in Ethnicity
Students	Asian	10	4.4%
	Black Non-Hispanic	16	7.1%
	Filipino	21	9.3%
	Hispanic	24	10.7%
	American Indian/Alaskan Native	3	1.3%
	Other	14	6.2%
	Pacific Islander	10	4.4%
	White Non-Hispanic	123	54.7%
	Not Reported	4	1.8%
	<b>Total</b>	<b>225</b>	<b>100.0%</b>

Unduplicated by semester. Students may appear more than once across semesters.

# Enrollment Demographics

## Enrollment by Ethnicity

Gender:

Age:

Year/Semester:

	Ethnicity	Year/Semester	Students
N	Asian	2003 - Fall	1
		2005 - Fall	2
		2006 - Fall	2
		Total	5
	Black Non-Hispanic	2002 - Fall	2
		2003 - Fall	1
		2004 - Fall	1
		2005 - Fall	1
		2006 - Fall	2
		Total	7
	Filipino	2002 - Fall	1
		2004 - Fall	1
		2005 - Fall	4
		2006 - Fall	3
		Total	9
	Hispanic	2002 - Fall	2
		2003 - Fall	1
		2004 - Fall	2
		2005 - Fall	2
		2006 - Fall	2
		Total	9
	American Indian/Alaskan Native	2002 - Fall	1
		2006 - Fall	1
		Total	2
	Other	2003 - Fall	1
		2004 - Fall	2
		2006 - Fall	2
Total		5	

	2003 - Fall	1
	2004 - Fall	1
	2005 - Fall	1
	2006 - Fall	2
	Total	7
Filipino	2002 - Fall	1
	2004 - Fall	1
	2005 - Fall	4
	2006 - Fall	3
	Total	9
Hispanic	2002 - Fall	2
	2003 - Fall	1
	2004 - Fall	2
	2005 - Fall	2
	2006 - Fall	2
	Total	9
American Indian/Alaskan Native	2002 - Fall	1
	2006 - Fall	1
	Total	2
Other	2003 - Fall	1
	2004 - Fall	2
	2005 - Fall	2
	Total	5
Pacific Islander	2002 - Fall	1
	2003 - Fall	2
	2006 - Fall	2
	Total	5
White Non-Hispanic	2002 - Fall	12
	2003 - Fall	9
	2004 - Fall	4
	2005 - Fall	9
	2006 - Fall	11
	Total	45
Not Reported	2004 - Fall	1
	2005 - Fall	1
	Total	2
Total	2002 - Fall	19
	2003 - Fall	15
	2004 - Fall	11
	2005 - Fall	21
	2006 - Fall	23

# Enrollment Demographics

## Enrollment by Gender ?

Age:

Ethnicity:

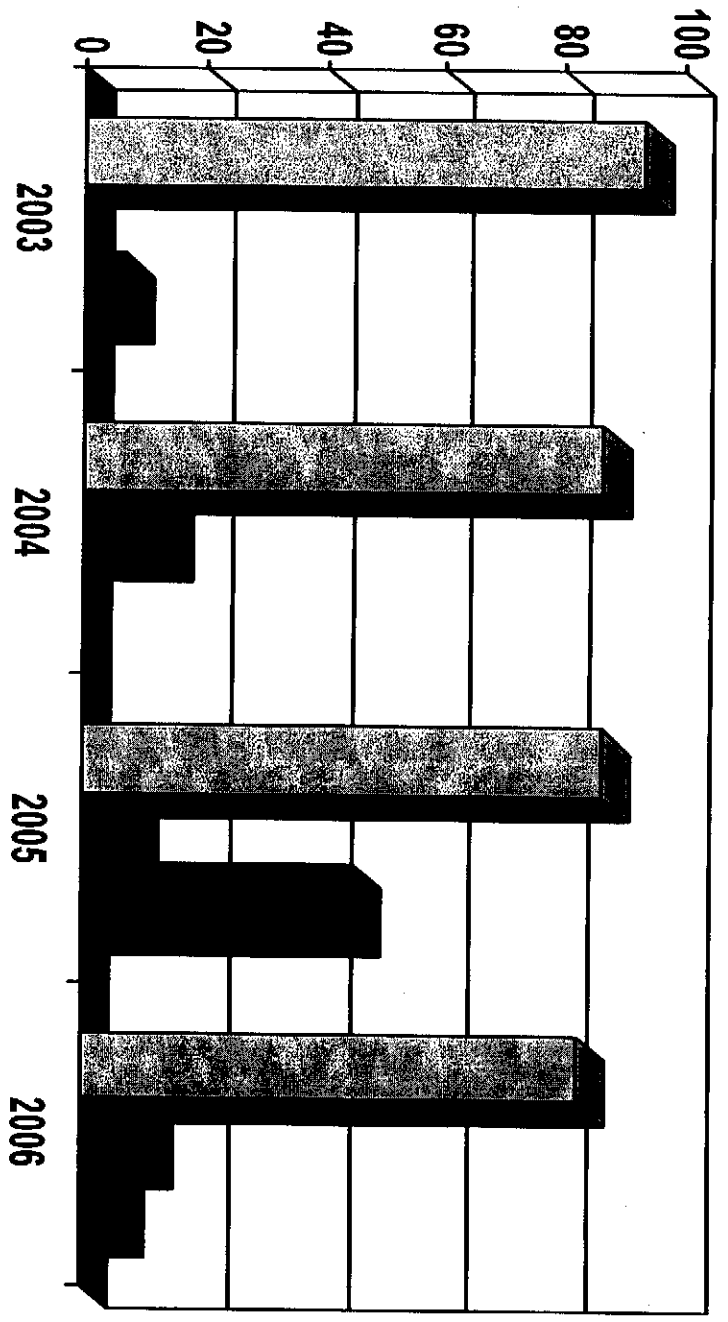
Year/Semester:

Course Number:

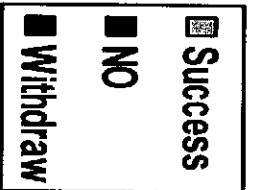
	Gender ↻	N ↻	% of N in Gender
Students ↻	Male	203	44.0%
	Female	256	55.5%
	Not Reported	2	0.4%
	Total	461	100.0%



# Orthopedic Technology Success/Withdrawal



Percent by Year



# Success/Withdrawal

?

## Success/Withdrawal

Gender:

Age:

Ethnicity:

Course Number:

	Course Success	Year/Semester	N	% of N in Course Success
Students	Success	2002 - Summer	17	100.0%
		2002 - Fall	36	94.7%
		2003 - Spring	57	100.0%
		2003 - Summer	14	100.0%
		2003 - Fall	28	93.3%
		2004 - Spring	36	92.3%
		2004 - Summer	13	92.9%
		2004 - Fall	19	86.4%
		2005 - Spring	29	100.0%
		2005 - Summer	7	100.0%
		2005 - Fall	33	86.8%
		2006 - Spring	49	100.0%
		2006 - Summer	8	88.9%
		2006 - Fall	38	82.6%
		2007 - Spring	46	97.9%
	Total	430	94.3%	
	No Success	2004 - Spring	3	7.7%
		2004 - Fall	3	13.6%
		2005 - Fall	3	7.9%
		2006 - Summer	1	11.1%
2007 - Spring		1	2.1%	
Total		11	2.4%	
Withdrawal	2002 - Fall	2	5.3%	
	2003 - Fall	2	6.7%	
	2004 - Summer	1	7.1%	

# Degrees & Certificates

## Degrees and Certificates ?

Gender: Total

Ethnicity: Total

Year/Semester: Total

Type of Award: Total

Award: Orthopedic Technology (52152)

	N	<input type="checkbox"/>
Students <input type="checkbox"/>	57	

APPENDIX 10

CONFERENCE AND WORKSHOP AND STAFF DEVELOPMENT

NAME:	ACTIVITY:	RELEVANCE:
Tom Byrne	National Association of Orthopedic Nurses National Conference 2002 – 2007	2006 Keynote Speaker attendee/presenter
	National Association of Orthopedic Technologists Annual Symposium 2002 - 2007	attendee/presenter Honor Society Award
	Canadian Society of Orthopedic Technologists 2002 - 2007	2007 Keynote Speaker attendee/presenter
	American Academy of Orthopedic Surgeons Annual Conference 2005	OT1 Course Presenter (first non MD)
	Zimmer OSP Orthopedic Workshops Nebraska, Georgia, New Jersey, Tennessee Kansas, Fairbanks, Alaska, New Foundland, New York City, Greenwich, Conn.	Course Presenter, Author
	National Association of Orthopedic Physician Assistants Annual Meeting 2002 - 2007	Presenter/ 2008 Keynote Speaker
	Hennepin County Orthopedic Trauma Conference 2002 – 2005	Presenter
	California Association of Orthopedic Technologists Annual Symposium 2003 – 2008	Education Chairman Presenter Keynote Speaker
	Sharp Health Care Professions Administrative Review 2007	Consultant / Presenter Competencies /Scope of Practice

(not a complete list)

**Grossmont College  
WSCH Report**

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
ANTH	3423	3423	3342	2838	3036	3510
AOJ	7895	9237	10421	12206	11000	10902
ARBC	580	594	714	992	1066	1131
ART	16824	17294	17075	16571	16350	17013
ASL	1949	2132	2191	2323	3430	3567
ASTR	2514	2544	2445	2517	2382	2511
BIO	19905	20928	21990	22088	22167	22353
BOT	4304	5249	4534	4981	4471	4510
BUS	13612	14351	13582	11386	10887	11669
CA	229	250	277	289	220	168
CCS	3602	3470	3356	2688	2769	2676
CD	7708	7985	7603	7647	6683	6708
CHEM	8475	8828	9760	9278	9137	9511
CHIN	N/A	295	230	275	285	330
COMM	12495	12398	12764	13066	12533	12481
CSIS	15188	13646	11808	9595	8846	8916
CVTE	3221	4025	4385	4420	4374	4535
DANC	3797	4071	3773	3979	3618	3813
ECON	6564	6333	6561	5667	7578	8844
ED	299	216	126	147	188	438
ENGL	29775	31762	31953	32279	33840	35370
ES	21100	21604	20583	20785	19109	19746
ESL	8933	9305	8633	7703	7386	7216
FACS	N/A	N/A	N/A	N/A	N/A	N/A
FREN	2111	2045	2187	1957	1786	1968
FS	953	1032	1011	885	948	879
GEOG	5106	4971	4575	4527	3564	3597
GEOL	1534	1490	1636	1474	1678	1428
GERM	1891	2030	2147	1882	1840	1992
HED	5216	5843	6003	5904	5223	5379
HESC	1111	1086	556	566	871	482
HIST	14172	15073	14832	14781	14050	15215
HUM	3543	3330	3228	2928	2420	2775
ITAL	640	610	640	590	470	605
JAPN	1338	1470	1444	1462	1646	1883
LIR	N/A	N/A	N/A	36	55	92
MATH	42000	43778	42825	43479	41258	41814
MCOM	5861	5988	5772	6195	5400	5447
MM	105	102	N/A	48	N/A	114
MUS	10247	10899	11232	11313	10385	10741
NURS	8413	8163	9132	7117	7048	7893
OCEA	1227	1236	1316	1338	1422	1401
OTA	390	429	494	495	685	612
PDC	1593	1187	1082	1170	1325	1162
PDSS	459	382	368	353	357	333
PHIL	6347	6177	5826	5448	4797	4941
PHYC	2250	2748	2508	2484	2298	2478
POSC	4638	4908	4731	4765	4006	3984
PSC	1005	948	1029	1110	879	843
PSY	11590	12379	12167	11504	10099	10042
RELG	1239	1245	1155	1209	990	1157

**Grossmont College  
WSCH Report**

	2001-2002	2002-2003	2003-2004	2004-2005	2005-2006	2006-2007
RESP	1476	1556	1651	2475	3020	3298
RUSS	606	900	731	768	768	679
SCI	1389	1521	1401	1158	1155	1287
SLPA	158	296	192	387	339	581
SOC	6632	7478	6669	6966	6519	6114
SPAN	13697	12878	12613	12045	11191	11645
SPDV	161	165	147	120	116	80
THTR	3960	3427	3521	3799	3548	3264
<b>Total</b>	<b>355446</b>	<b>367702</b>	<b>362921</b>	<b>356443</b>	<b>343512</b>	<b>354122</b>

**YTD Budget to Actual**

Ledger: GL WB  
Transactions Thru: Wed Nov 07 2007

**(with Encumbrances)**

Fiscal Year: 07/08  
Period: NOVEMBER

Org. Key: 1374090      ROP - Orthopedic Tech

**EXPENSE ACCOUNTS**

<u>Object Description</u>	<u>Object</u>	<u>Budget</u>	<u>Actual</u>	<u>Encumbrance</u>	<u>Balance</u>
Hourly Instructor	1310	35,869	12,286	0	23,583
Hrly Instr, Substitute	1314	500	0	0	500
Hrly Instr Aides, Short Term	2412	3,000	918	0	2,082
Employee Benefits	3850	4,241	1,416	0	2,825
Supplies-General	4310	18,000	1,083	6,138	10,780
Equip \$500-\$1,999	4550	2,000	0	0	2,000
Operational Indirect-R Fds	5595	5,089	933	0	4,156
<b>Total Expenses:</b>		<u>68,699</u>	<u>16,636</u>	<u>6,138</u>	<u>45,926</u>

**YTD Budget to Actual**

Ledger: GL WB  
Transactions Thru: Sat Jun 30 2007

**(with Encumbrances)**

Fiscal Year: 06/07  
Period: JUNE

Org. Key: 1374090      ROP - Orthopedic Tech

**EXPENSE ACCOUNTS**

<b><u>Object Description</u></b>	<b><u>Object</u></b>	<b><u>Budget</u></b>	<b><u>Actual</u></b>	<b><u>Encumbrance</u></b>	<b><u>Balance</u></b>
Hourly Instructor	1310	40,884	44,078	0	-3,194
Hrly Instr, Substitute	1314	500	18	0	482
Hrly Instr Aides, Short Term	2412	3,647	3,647	0	0
Employee Benefits	3850	5,142	5,142	0	0
Supplies-General	4310	17,168	13,089	0	4,079
Operational Indirect-R Fds	5595	5,278	5,278	0	0
<b>Total Expenses:</b>		<b><u>72,619</u></b>	<b><u>71,252</u></b>	<b><u>0</u></b>	<b><u>1,367</u></b>



**YTD Budget to Actual**

**(with Encumbrances)**

Fiscal Year: 05/06  
Period: JUNE

Ledger: GL WB  
Transactions Thru: Fri Jun 30 2006

Org. Key: 1374090      ROP - Orthopedic Tech

**EXPENSE ACCOUNTS**

<b><u>Object Description</u></b>	<b><u>Object</u></b>	<b><u>Budget</u></b>	<b><u>Actual</u></b>	<b><u>Encumbrance</u></b>	<b><u>Balance</u></b>
Hourly Instructor	1310	39,875	38,837	0	1,038
Hrly Instr, Substitute	1314	1,000	196	0	804
Hrly Instr Aides, Student	2411	2,000	1,997	0	3
Hrly Instr Aides, Short Term	2412	1,161	1,161	0	0
Employee Benefits	3850	4,664	4,426	0	238
Supplies-General	4310	14,578	9,397	0	5,181
Equip \$500-\$1,999	4550	6,000	5,443	0	557
Operational Indirect-R Fds	5595	5,382	4,481	0	901
<b>Total Expenses:</b>		<b><u>74,660</u></b>	<b><u>65,938</u></b>	<b><u>0</u></b>	<b><u>8,722</u></b>

**Grossmont-Cuyamaca Community College  
San Diego County ROP**

**ADA by Section and Attendance Type**  
Dates for Term 3: 07/01/2005 - 06/30/2006

November 07, 2007

02:30:37PM

Course Code 426011; Provider Code 53; Section Number: 531040,532040

PROVIDER	PROGRAM	SECTION-CRS	A/C STAT	ATT TYPE	HOURS	ADA	STUDENT COUNTS***	
							MALE	FEMALE
<b>Grossmont-Cuyamaca Community Coll</b>								
<b>Health Sci/Med Technology</b>								
<b>531040 - 426011</b>								
				Adult				
				CC	2,234.00	4.26		
				Classroom	9,828.00	18.72		
				Adult	12,062.00	22.98		
		<b>531040 - 426011</b>			<b>12,062.00</b>	<b>22.98</b>	<b>8</b>	<b>19</b>
		<b>532040 - 426011</b>						
				Adult				
				Classroom	1,269.00	2.42		
				Clinical	603.00	1.15		
				Adult	1,872.00	3.57		
		<b>532040 - 426011</b>			<b>1,872.00</b>	<b>3.57</b>	<b>10</b>	<b>11</b>
		<b>Health Sci/Med Technology</b>			<b>13,934.00</b>	<b>26.54</b>	<b>18</b>	<b>30</b>
<b>Grossmont-Cuyamaca Community C</b>								
					13,934.00	26.54	18	30
		<b>Grand Totals</b>			<b>13,934.00</b>	<b>26.54</b>	<b>18</b>	<b>30</b>

\*\*\* Unduplicated (distinct) counts. Unduplicated at each level.  
Class records with no attendance are excluded.

User Id: MMARTENS

**Grossmont-Cuyamaca Community College  
San Diego County ROP**

**ADA by Section and Attendance Type  
07/01/2006 - 06/30/2007**

November 07, 2007

02:14:16PM

Provider Code 53; Section Number: 531040,532040,532040

PROVIDER	PROGRAM	SECTION-CRS	A/C STAT	ATT TYPE	HOURS	ADA	STUDENT COUNTS***	
							MALE	FEMALE
<b>Grossmont-Cuyamaca Community Coll</b>								
<b>Health Sci/Med Technology</b>								
<b>531040 - 426011</b>								
			Adult					
				CC	1,931.50	3.68		
				Classroom	7,314.00	13.93		
			Adult		9,245.50	17.61		
			Concurrent					
				CC	127.00	0.24		
				Classroom	420.00	0.80		
			Concurrent		547.00	1.04		
		<b>531040 - 426011</b>			<b>9,792.50</b>	<b>18.65</b>	<b>10</b>	<b>23</b>
		<b>532040 - 426011</b>						
			Adult					
				CC	1,855.17	3.53		
				Classroom	2,079.00	3.96		
			Adult		3,934.17	7.49		
			Concurrent					
				CC	107.00	0.20		
				Classroom	63.00	0.12		
			Concurrent		170.00	0.32		
		<b>532040 - 426011</b>			<b>4,104.17</b>	<b>7.82</b>	<b>13</b>	<b>24</b>
		<b>Health Sci/Med Technology</b>			<b>13,896.67</b>	<b>26.47</b>	<b>18</b>	<b>35</b>
<b>Grossmont-Cuyamaca Community C</b>					<b>13,896.67</b>	<b>26.47</b>	<b>18</b>	<b>35</b>
<b>Grand Totals</b>					<b>13,896.67</b>	<b>26.47</b>	<b>18</b>	<b>35</b>

\*\*\* Unduplicated (distinct) counts. Unduplicated at each level.  
Class records with no attendance are excluded.

User Id : MMARTENS

2006 ORTHOPEDIC TECHNOLOGY PROGRAM  
ADVISORY COMMITTEE MEETING MINUTES

Open: 10:30 am  
October 25, 2006  
4 Points Sheraton, San Diego

**Members Present:**

Carrie Clay	Associate Dean of Regional Occupation Program
Tom Byrne, OTC	UCSD Clinical Instructor, Grossmont College Instructor, Ortho. Tech. Program
Chris Rice, OTC	Kaiser Permanente Clinical Instructor, Grossmont College Instructor, Ortho. Tech. Program
Cris Leventis	Manger EBI, Inc., President Ortho Plus
Kevin Helmer, OTC	President Mission Surgical Inc.
Michael Vaughn OTC	Manager SCOP Inc.

### **Welcome and Introductions:**

Meeting called to order 10:30 am. Each member present was introduced by Tom Byrne and each described their business affiliation with the program.

### **Reading of 2005 Minutes:**

Each member was sent a copy of the 2005 minutes in advance of the meeting for their review. A motion to accept the minutes as reviewed was made and seconded. The minutes were unanimously approved.

### **Competencies and Course Outline reading and review:**

The competencies and course outline were revised in 2003 and after review were approved by the committee. Notes were made to once again thank Mr. Rick Kirby for his outstanding efforts on behalf of our program, in making these accurate and appropriate.

### **NBCOT Test Results:**

2 students out of the 19 that took the NBCOT Board Exam failed to pass the test. Note that both were counseled not to take the test. One student while very bright, had difficulty with the clinical application of the course, the other had a language (Korean) issue.

Ryan Park of the 2006 class received a scholarship award of \$600. to attend the Dallas NAOT National Symposium. His research paper was presented to the general meeting and was very well received. We are proud of Mr. Park and the work he put into the program and of how he so well represents the course. Mr. Cris Leventis provided the funding, out of his own pocket, for this scholarship. Most impressive.

### **Lecture, Lab and Clinical Rotation Results:**

A strong concern by Mr. Byrne and Rice concerning the clinical hours. It was a year in which 9 students already had full time jobs in May! We both believe that this issue is important to document. Our primary goal is to train for careers. If an opportunity arises and an appropriate student fits the needs of an employer, we will continue to send them.

The clinical rotation at the VA was another concern; however, with the help of Mr. Ryan Park, a student, we survived to be approved for clinical rotation there. The substantial report and forms associated were all prepared and submitted. The new process is very confusing and without Mr. Park and of course the constant support of Dr. Wayne Akeson, we would not have been successful.

The UCSD Clinical Rotation was also up for review. The voluminous report was presented to the 2006 Allied Health Education Accreditation Committee and was approved for the maximum of three years. It was noted that the report was made a model for all ancillary health program submissions. It was great to see the very positive responses from the members of the board.

Children's Hospital clinical, while limited, is still very important to us as a demonstration of a private hospital setting. Lisa Brudvick has been a strong clinical advisor for the course. Dr. Scott Mubarak, Dr. Wallace and Chambers have truly supported the program and are deserving of our thanks.

E.S.L.R's Basic and Soft Skill requirements were reviewed and it was observed that these are strongly evident within the curriculum of the Orthopedic Technology Program's syllabus.

### **New Building Review:**

Mr. Rice met yesterday with the architect for the new Health Science Building on campus. The needs of the lab were discussed and the current situation in 352B observed by the architect. Chris stated that he emphasized the need for at least two sinks with "plaster traps" as well as multiple wall electrical outlets with ground fault. A central drain for the floor, storage space and a control system for dust were also required. Time estimates for entering the building were "still in the data gathering phase".

### **Supplies and Equipment Needs:**

Mr. Byrne thanked the ROP for their continued strong support for our heavy supply requirements. Further, the very significant donations by Cris Leventis and his company provided for much of the advanced materials used in the lab. Mission Surgical also is a strong supporter.

**Needs:** Eight (8) exam tables. The current wooden ones are not safe and are inappropriate for job simulation. They need to be replaced now. Further, there needs to be another two (2) cast saws and spreaders. The roller stools are in disrepair. Six (6) new ones need to be ordered. These needs were discussed and a motion was made to move for approval of the requested items. They were so approved by a unanimous vote.

Continued creative efforts to obtain materials for lab are being worked on now.

Attendance by students at the California Association for Ortho. Techs. was supported by Mr. Cris Leventis. A true patron of the profession he and Mr. Michael Johnson, VP of the association invited, sponsored not only Grossmont ROP but also 20 students from Anaheim ROP Ortho Tech. Program were sponsored. This provided a huge opportunity for our students and theirs to network with Reps. Techs. and the MD speakers. The hands on workshops provided a strong source of new materials to gain experience with. A very positive event that we hope will continue to allow students to attend without the \$45 fee. Thanks to Mr. Leventis and his great wife for their constant support.

Tom Byrne cited Chris Rice as THE best lab instructor. Very obvious when our students and those from up north worked together.

Zimmer Orthopedic Supply, and Mr. John Sillic provided all traction and educational materials for the course. We are most thankful for this expensive equipment.

Mr. Bull of Royce Medical has promised to continue his excellent support and that of his company. He has been a very significant supplier of materials to us.

Chris and I thank these individuals and companies who recognize that the education that ROP provides is valuable and they want to be part of it.

### **Job Placement:**

There were 17 successful graduates in 2006 and ALL have employment as Orthopedic Technologists. This is most impressive in a difficult market such as San Diego. Actually there are four jobs posted as of today that remain unfilled. Dr. Akeson has long predicted that there would be a steady increase in the roles of ancillary medical staff in orthopedics. That is why he is the Medical Director of this program. His influence has made our course a national clearing house for employers who need technologists.

UCSD has announced that, for the first time in 14 years, they are to hire 4 FTE Orthopedic Technologists!

From Sharp Reese-Steele to Scripps Mercy to Scripps Greene, there are an increasing number of very good positions open.

### **Allied Health and Economic Changes:**

On this subject we refer to the data provided at the Industry and Career Educator Summit of 2006. We are attending this meeting to represent Grossmont College and to learn of the future. A great deal of data from demographics of labor force to housing to which professions showed the most growth potential. Health Care was by far the future stated the many consultants from SANDAG and other agencies. The aging population and their needs will increase, so will health care and personal training. Health and fitness estimated at a 29% growth rate over the next three years.

Dr. Akeson is always right.

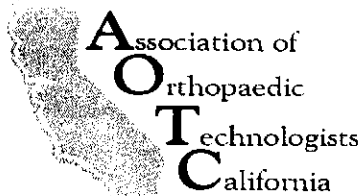
### **Recommendations:**

Each member was asked what they would add if this were their course:

- 1) number one response (universal) add business practice skills, billing facts, DME, L codes, and similar means by which business is reimbursed for Orthopedic devices. This will insure multiple roles for the Ortho. Techs. In tight markets.
- 2) It was noted that the strong local ortho. tech. association would benefit from Tom Byrne agreeing to, at least temporarily, act in a leadership post.

All members were thanked for there dedication, generosity and the giving of their valuable time and effort on behalf of the Grossmont College Orthopedic Technology Program.

Adjournment: 1:00pm



# 10<sup>th</sup> Annual AOTC Orthopaedic Technologists Symposium Conference & Workshop

**Saturday, April 5, 2008**

**8:00 am – 3:30 pm**

Sharp HealthCare • Spectrum Building  
8695 Spectrum Center Blvd. • San Diego, CA 92123

## EDUCATIONAL AGENDA

- 8:00 am – 8:30 am      Registration & Breakfast
- 8:30 am – 8:45 am    Opening Remarks – Michael Johnson, AOTC President
- 8:45 am – 8:50 am    **Medical and Legal Implications in Casting and Splinting**  
Tom Byrne, PAC, OTC
- 8:50 am – 9:00 am    **Casting Tape: How It's Made**  
Bryan Metts, National Sales Manager, Carolina Narrow Fabric
- 9:00 am – 9:20 am    Vendor Break
- 9:20 am – 3:30 am    **Casting and Splinting Hands-On Workshop**  
Workshops will be divided into stations to include beginning to advanced applications and techniques.

Working Lunch Provided.

Each participant will receive a certificate of completion and be eligible for prize drawings.

## SPONSORS



## PRE-REGISTRATION FORM

*To pre-register for this program, complete the information below and mail this form with your registration fee to:  
Teri Sowul, 125-9 Old Grove Rd #333, Oceanside, CA 92057 • For questions, call Mike at (619)985-2564*

### REGISTRATION FEE (Please mark one box below)

- Members:      \$25\* Lab Fee for 2007 paid members
- Non-Members:    \$45\* Lab Fee (includes 2008 membership)
- Students:      Free (must be currently enrolled in a program – does not include 2008 membership)

*\* Make checks payable to AOTC.*

Program Name: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone #: Home \_\_\_\_\_ Work \_\_\_\_\_ Cell \_\_\_\_\_





**Association of  
Orthopaedic  
Technologists  
California**

**9<sup>th</sup> Annual AOTC  
Orthopaedic Technologists Symposium  
Conference & Workshop**

**Saturday, October 6, 2007**

**7:45 am – 2:00 pm**

Sharp HealthCare • Spectrum Building  
8695 Spectrum Center Blvd. • San Diego, CA 92123

**EDUCATIONAL AGENDA**

- 7:45 am – 8:00 am      Registration & Breakfast
- 8:00 am – 8:05 am      Opening Remarks
- 8:05 am – 8:45 am      **Modalities and Fixation**  
Anthony G Sanzone, M.D.
- 8:50 am – 9:30 am      **Foot and Ankle Injuries**  
David Sittler, M.D., Sharp Rees-Stealy Orthopedic Surgery
- 9:30 am – 10:00 am      Vendor Break
- 10:00 am – 10:45 am    **Current Concepts in the Diagnosis, Biology and Management of  
Patients with Bone Tumors**  
Robert Talac, M.D., UCSD Medical Center
- 10:50 am – 11:30 am    **Thinking About Becoming a P.A.**  
Steve Shevlin, P.A., Sharp Rees-Stealy
- 11:30 am – 11:40 am      Break
- 11:40 am – 12:30 pm    **KCI Wound Vac; Case Studies, Mechanism of Action and Hands On  
Demonstration**  
Liz Stafford, R.N., KCI
- 12:30 am – 2:00 pm      Working Lunch with a **Hands-On Workshop – Casting and Splinting  
Techniques** with the incomparable Tom Byrne, OTC, PA-C, Sharp Rees-Stealy

*Six (6) Continuing Education Units (CEUs) will be offered from NBCOT.*

**PRE-REGISTRATION FORM**

*To pre-register for this program, complete the information below and mail this form with your registration fee to:  
Teri Sowul, 125-9 Old Grove Rd #333, Oceanside, CA 92057 • For questions, call Mike at (619)985-2564*

**REGISTRATION FEE** (Please mark one box below)

- Members:**      \$10\* for 2007 paid members      \* Make checks payable to AOTC.
  - Non-Members:**    \$30\* (includes 2008 membership)
  - Students:**      Free (must be currently enrolled in a program – does not include 2008 membership)
- Program Name: \_\_\_\_\_

Name: \_\_\_\_\_

Address: \_\_\_\_\_

City: \_\_\_\_\_ State: \_\_\_\_\_ Zip: \_\_\_\_\_

Email Address: \_\_\_\_\_

Phone #: Home \_\_\_\_\_ Work \_\_\_\_\_ Cell \_\_\_\_\_

# NAOT

National Association of  
Orthopaedic Technologists



Dedicated to the continued educational development of orthopaedic allied health care professionals who specialize in casting, splinting & bra

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## What is an Orthopaedic Technologist?

The Orthopaedic Technologist (OT) is a specifically trained allied health care ind assists the orthopaedic surgeon in the practice of medicine. An OT is an extensi orthopaedic surgeon and assists in the care of sick and disabled persons. OTs n the ability to relate well to other people, be considerate of their conditions and at communicate with patients in understanding their anxieties and fears. An OT is f routine office and departmental procedures and is able to perform certain basic r functions.

An expert in plaster and synthetic cast application, an OT is responsible for instr patients about the dangers of this form of treatment. An OT has the skill to remo with care and fragility, is equipped with the general principles of traction techniq prepares or sets up specific types of traction requested by the orthopaedic surge able to assess patients in traction, detect deficiencies in the apparatus and make adjustments as necessary.

The OT may perform as a first assistant to the orthopaedic surgeon in the operat To do this, OTs must understand medical and surgical asepsis. This would inclu preparing for surgical procedures, assembling and preparing the fracture table tc specifications of the orthopaedic surgeon.

The OT is able to fit and adjust canes, crutches and walkers, as well as giving p: instruction on the use of these walking aids. Other important responsibilities of th the ability to apply simple braces, prosthetics, perform minor adjustments and re well as fabricate splints for various conditions under the direction of the orthopae surgeon.

All of these important duties fall under the realm of an Orthopaedic Technologist dedicated to the continued education of these important health professionals.

## STANDARDS OF PRACTICE & JOB DESCRIPTION

NAOT  
8365 Keystone Crossing  
Suite 107  
Indianapolis, IN 46240  
(317) 205-9484  
(317) 205-9481 FAX  
naot@hp-assoc.com  
naot.org

Last Revised 3/26/06

# NAOT

National Association of  
Orthopaedic Technologists



Dedicated to the continued educational development of orthopaedic allied health care professionals who specialize in casting, splinting & bra

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## Certification

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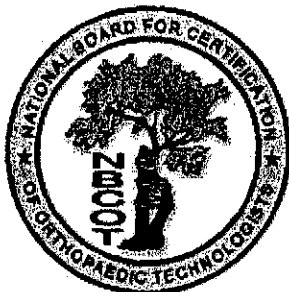
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Please note that certification of Orthopaedic Technologists (OTC) is handled exclud National Board for Certification of Orthopaedic Technologists (NBCOT). The NBCOT is a separate entity from the National Association of Orthopaedic Technologists (NAOT) which focuses on continued professional development and education of OTCs. Any que: inquiries about existing policies, rules, regulations, verification and deadlines relat certification or recertification should be addressed to Melanie Ziel, the NBCOT's E Director, using the contact information listed below.

### Main Contact Information

National Board for Certification of Orthopaedic Technologists (NBCOT)  
c/o Melanie Ziel, Executive Director  
4736 Onondaga Blv. #166  
Syracuse, NY 13219  
(866) 466-2268  
Fax: (315) 476-8840  
Email: GONBCOT@aol.com

Certification for Orthopaedic Technologists is designed to promote excellence in th Orthopaedic Technologist by:

- Credentialing those individuals who meet the requirements of the NBCOT.
- Advancing the growth of Orthopaedic Technologists in the orthopaedic communi
- Maintaining a level of knowledge required for certified Orthopaedic Technologist
- Certified Orthopaedic Technologists standard of knowledge assists the facility, g and the medical community in the assessment of Orthopaedic Technologists.
- To learn more about certification, please visit [www.nbcot.net](http://www.nbcot.net)

NAOT  
8365 Keystone Crossing  
Suite 107  
Indianapolis, IN 46240  
(317) 205-9484  
(317) 205-9481 FAX  
[naot@hp-assoc.com](mailto:naot@hp-assoc.com)  
[naot.org](http://naot.org)

Last Revised 12/10/07

## Examination

The NBCOT provides a test to certify and re-certify Orthopaedic Technologists to competency for Orthopaedic Technologists. Technologists enter practice from ma backgrounds and are employed in diverse Orthopaedic subspecialties. The Exam Content Outline has been designed taking these differences into consideration. Th examination consists of 150 multiple choice questions divided among the following:

Assessment; Casting, Splinting and Bracing; Traction; and Surgery. To date, more orthopaedic technologists have been certified by NBCOT.

### **Eligibility Routes for Certification**

To qualify to sit for the certification examination, an orthopaedic technologist must meet the five criteria listed below:

A: 2 years of Full Time on the job training in Orthopaedics under the direct supervision of an Orthopaedic Physician.

B: Completion of an Orthopaedic Technologist School/Program plus 6 months full time experience in Orthopaedics.

C: Completion of a NAOT-recognized Orthopaedic Technologist School/Program.

D: Certified in an Orthopaedic related field and a minimum of 1 year experience in Orthopaedics.

E: Certified as an ATC (Athletic Trainer Certified) with a minimum of 6 months experience in Orthopaedics.

### **Additional Information**

For further details about exam fees, test dates and sites (over 300 testing sites located throughout the country), continuing education and all other questions relating to certification, visit [www.nbcot.net](http://www.nbcot.net) or contact NBCOT at (866) 466-2268 or via email at [gonbcot@aol.com](mailto:gonbcot@aol.com)



**Program Review**  
**Questions & Answers**

**RESPONSES TO QUESTIONS  
REGARDING**

**ORTHOPEDIC TECHNOLOGY**

**ACADEMIC PROGRAM REVIEW**

Submitted by: Tom Byrne, OTC,OPAC

Pg Q

- 1) 4 Is Michael Parish still on? Mr. McMillan is a lab assistant? Have you increased your faculty pool?

Response:

Following the title page there is an Adjunct Faculty page. Michael Parish is listed. This is because he IS faculty, primarily as a sub, long term as possible replacement for the future. On page 3 (4) please find additional staff.

Michael McMillan, OTC IS our lab assistant as well as a clinical instructor at UCSD Medical Center. Further Lindie Tyler, OTC also functions as a clinical instructor at UCSD.

My primary addition to faculty pool is Mr. Parish. He works with me at Sharp Orthopedics and is a current instructor for Boston-Reed College. He has actually already taught for me on several occasions.

- 2) 5 5 Can you describe what in-communication means? Does Carrie Clay handle this for you?

Response:

We the teachers, who work full time days, do indeed depend on Michele of Carrie Clay's staff to communicate, advertise and provide brochures regarding the Orthopedic Technology Program to the campus departments.

Each year the counseling staff of Grossmont College provides our Program's students with presentations on resumes, cover letters, job seeking and keeping skills as well as interview techniques. We consider these invaluable to our students success. Our student success rate at getting and keeping jobs reflects this.

- 3) Appendix 4:

- 4) 9 2.1 Its been a while since you updated your course outlines, especially texts. Do you have a timeline for updates?

Response:

The Orthopedic Technology Program Advisory Board annually reviews all course outlines and syllabus materials as well as texts.

Texts:

“Netter’s Concise Atlas of Orthopaedic Anatomy”, Thompson, Saunders Publishing, Copyright 2002

“Manual of Orthopaedics”, sixth edition, HCMC, Swiontkowski, Lippincott Publishing, Copyright 2006

“A Manual of Orthopedic Terminology, seventh edition, Nelson, Mosby Publishing, Copyright 2007

“Essentials of Orthopedics and Trauma”, fifth edition, Dandy, Churchill Livingstone, Copyright 2007

“Physical Examination of the Spine and Extremities”, Hoppenfeld, Prentice Hall Publishing, Copyright 1976

These are texts employed by the University of California School of Medicine for 4th year medical students as well as Orthopedic interns and residents (MDs). These books represent all current standards of practice for our profession.

- 5) 9 2.2 Student Learning Outcomes - SOME EXAMPLES –

Assessment Tools employed by our program:

Certification Exam – National Board of Certification for Orthopedic Technologist, 165 question, multiple choice written exam that covers all aspects of the profession. 96% pass rate over 26 years.

Multiple choice exam - second semester only – demonstrates knowledge and comprehension as students recall differentiate between the disclaimers compare them and choose which is most appropriate response.



Essay – Research Report – assigned first semester, due end of second. Assigned orthopedic subject matter that students must discuss and document historic, current and future research sources that relate to the topic. They must construct a compilation of the data by choosing which justifies each segment of the paper.

Alumni/focus groups - The annual Advisory Board Meeting is attended by several graduates of the course. They describe how the materials of the program relate to real professional skills and knowledge. Their appraisal of the course helps us identify how the syllabus should be set up.

Flowchart/Diagram – Students are to create a pictorial presentation of their research paper. They design and assemble charts, graphs arranged to present the data, on table top displays, to our State Association of Orthopedic Technologists meeting.

Practical Examination / Problem Solving - In the lab setting students apply lecture theory, to construct practical patient care modalities. They must plan materials and methods, organize them and produce appropriate devices. The resulting creations are compared to demonstrated standards.

Practicum (Hospital) - Here students are indeed in actual job situations. UCSD is where the students ability to perform skills from communication to direct patient care. Students must comprehend the physician order, discuss the plan and relate that plan to lecture as well as lab skills and use them to assemble materials, prepare the patient and create a solution to the problem that follows the established plan.

6. 11 2.6 Describe how your program encourages students to extend learning outside of the formal classroom. “flesh this out ...”

Response: (page 13 2.11 note that Grand Rounds and Trauma Rounds (outside the classroom) are discussed .)

The California Association of Orthopedic Technologists has 4 annual symposiums that provide both didactic lectures from physicians as well as 4 hour, hands-on, multidiscipline labs. Here our students learn along side all the technologists from the state of California. This symposium is one means for our practicing OTCs to earn C.E.U.s for recertification. Our students are not eligible for these units, however this is a great format for learning and networking with professionals in the field.

The National Association of Orthopedic Technologists Annual Symposium is also open to our students. This is a four day series of lectures and workshops obviously designed for our profession. Again students are not able to gain CEUs until they pass their board exam. The courses offered are designed to help attendees with the content of that board exam. I offer a 2 hour session at this meeting for anyone taking the exam ( it is also offered at the meeting if you so choose).

Whelessonline.com is a Duke University Orthopedic Site. As previously discussed, this is a genuine source of input for our students anytime they are on line.

7. 11 2.7

How have you reflected these changes in your curriculum?

Response: In the history of the American Academy of Orthopedic Surgeons Annual Symposium all presentations are by Orthopedic Providers. Except three years ago in San Francisco when some Ortho. Tech. was given the task of presenting the most recent subjects related to Blood Borne Pathogens, HIPPA, and CDC rules as well as OSHA safety concerns. I was that speaker (2 hours) and all aspects of that presentation are part of our curriculum.

Our students are required to sign an agreement (contract) regarding appropriate behavior in the classroom and in clinical settings.

8. 13 Bio 214? We don't have a 214. 140 and 144 are the requirements. Typo or confusion with another school?

Response:

Indeed 140 and 144 are the requirements. The excuses I offer range from age based dementia to mild radial nerve neuropathy (numb index).... or maybe I just miss typed the dern thing.

9. 5,14

3,2.13 Would you like to work with the LRC to do an ongoing team up for bibliographic instruction throughout the semester?

Response:

There is indeed a trend by students (even MDs) to go on line for everything. True literature searches are still very much required for grants, journal articles as well as monographs. It would be of great value to have some, on going form of bibliography study. The staff will discuss this and try to find a time when this could be added.

10. 15

2.1,6 Comment on the results of the student surveys. Are there any implications or insights from them? Are there enough library resources to meet the student's needs.

Response: Our students also have the UCSD main library, biomechanics library as well as the Medical Library on the Hospital Campus in Hillcrest. This affords them a variety of library time and contact. They are afforded the same library privileges as any University of California medical student.

11. 17

3.1 Can you give some examples of specific ways your program is fostering success? How do you transfer this information to your curriculum and your students?

Response: The constantly changing content of the handouts used in our program added to the amazing influx of new materials and technologies from our supporters combine to keep our students aware of the constant changes in health care. They are told that they will never know all there is, never. They and we can only pay attention to the latest articles and lectures. Even in their practices the knowledge that they must constantly learn just to survive is most critical if they are to succeed.

I was the Keynote Speaker this year for the National Association of Orthopedic Technologists held in Minnesota. I was assigned the topic of the "Medical / Legal Aspects of Standards of Practice for Our Profession." I bring this (actually I took it from my lecture notes).

12.

17 3.2

Is this what you do for all your students in 3.1?  
How do you students communicate with from other language groups?  
How do you address this in your class? What about cultural differences?

Response:

Yes. For all students.

The UCSD and Childrens Hospital rotations have patients from extremely diverse cultures and languages. From the "Mong" tribe from the mountains of the Philippines to the Somalia refugees to recent Iranian population mixed with Spanish and China and Czechoslovakian patients I feel our students are exposed to not only cultural diversity but also societal groups. Many "Homeless" and indigent are also mentally challenged and/or prisoners. Then there are those who are physically challenged, amputees, paralyzed young patients. Our specialty usually requires us to come into physical contact with patients. This is a very

interesting aspect of communication, wherein the technologist must look for a response in the patient's mannerism or even expression. Many cultures will mask any response with a very artificial smile. This is not to be construed as happiness. Gestures, some specific to a culture are seen as insults. All of this is presented to our students and reinforced at the clinical practicum/

The hospital has specially trained translators, some staff assist with the language and quite our students are preferred as translators as they also know the language of Orthopedic Surgery. It is a small world in medicine. Care with empathy and accuracy are the goals. Patients, even those who speak the same language, rarely remember what the doctor says in the exam room ( N.E.J.M. Aug, 1999, Harvard School of Med. study on retention of information by pts. in 500 nonprospective patients only 11% retained the three points of information they were told during their examination.). It is often the role of the ancillary staff to reinforce physician instructions.

13.

18 3.4

Are we going to lose the ROP advertising budget for recruiting in the transition?

I am not sure. I will have Carrie Clay's team answer that.

14.

22 4.5

Does this work?

Because we are blessed with Carrie Clay, Michelle and Rick Kirby, I think we are always very well informed on campus activities and requirements. Carrie is always at our Advisory Board Meetings as is Mr. Kirby. To their great credit I have, somehow, actually been fairly compliant with regard to things I am supposed to do. Yes, it works.

15.

22 4.6

Have you considered using Blackboard or a similar site as a repository of sources for the department? Tina calls it a "webliography".

I have just been introduced to Blackboard at our last (actually it was our Last) ROP Staff Development Meeting. I have just lost my laptop to a thief so I hope to be more up to date soon. I would like to achieve some of our data.

16.

22 4.8

When the lab techs take over the simulation labs how will this affect your support by the Health Science Lab Staff.?

Our program is very dependant on the Health Science Lab Staff. Since the inception of the program 27 years ago the H.S. Lab team has truly helped us in our lab and classroom logistics. I think there will be an impact by it should be acceptable.

17.

24 5.7

Since your program is at night, is there a possibility of offering a duplicate program in the daytime. Are there clinical sites available? Is it possible to expand with the new facilities?

22 % of last year's class responded that they prefer morning classes.

Two concerns: 1) As stated our adjunct faculty are all full time Orthopedic Technologists. It is my firm belief that, for our program, our success is due to our instructors being active in the profession. This does not mean we could not work toward that goal. It would just mean finding staffing.

All clinical sites are 8am – 5pm weekdays. That is an industry standard for outpatient clinics. Yes, hospitals are open 24 hours a day. Many of us take call and work nights, days, weekends, holidays however having students “on-call” is inappropriate and not acceptable to the Allied Health Education Council at UCSD. Of note I do have a 6pm-10pm rotation for students in the Urgent Care at UCSD. This is offered to advanced students and these are the only hours it is open.

I have not seen the new facilities. The original basement site has been changed. If it is indeed to be used solely by Orthopedic Technology, them that would help.

18.

25

Ask Carrie and Fred to help you put together Appendix 14, a cost per student FTE.

I will ask Carrie for that information.

19.  
28 8.1

Can you give us a list of needs? You may include equipment, supplies, maintenance, staff .... Carrie and Fred will help you.

Carrie Clay and Michelle have had our program put together a list of needs and they have systematically reviewed and supplied all of our requests from DVDs on surgery to a new skeleton (Halloween), to a copious amount of supplies to get us started as a true Grossmont College Program.

Submitted, Respectfully,

Tom Byrne, OTC, OPAC  
instructor Orthopedic Technology Program

**Program Review Committee**  
**Summary Evaluation**