

# Radiography Program

Comprehensive Academic Program Review  
2007-08

*Associate in Science Degree:  
Radiography*



Department of Institutional Research  
and Effectiveness  
St. Petersburg College

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## Comprehensive Academic Program Review Produced by Radiography Program

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## Executive Summary

### *Introduction*

The program review process at St. Petersburg College (SPC) is a collaborative effort designed to continuously measure and improve the quality of educational services provided to the community.

### *Program Description*

Radiographers are important members of the health care team, dedicated to optimum patient care. Their primary role is to perform the technical procedures necessary to produce diagnostic x-ray studies, administer quality patient care and to assist the radiologist physician. Although most radiographers are employed by hospitals or clinics, there are many positions available in private physicians' offices and industry. Graduates may apply to take the American Registry of Radiologic Technologists (ARRT) examination as well as the State of Florida examination for the general radiographer.

### *Degrees Offered*

An Associate in Science Degree in radiography is offered at SPC.

### *Program Performance*

- Spring has had the highest *Actual Course Enrollment* for the Radiography program over the last three years. Enrollment showed an increase in the Spring and Summer semesters this year.
- *Student Semester Hour (SSH) Productivity* for 2006-07 has been the highest of the previous three years even exceeding a value of one (1.03) for the Spring semester.
- The *number of program graduates* in the Radiography Associate in Science degree program reached a six-year high of 20 graduates in 2004-05, but has declined with 16 graduates in 2005-06 and 12 graduates in 2006-07.
- The vast majority of students in the program *succeed* in the courses. In Spring of 2006, 93.9% of the students were successful, as compared to 98.8% in Spring of 2007. In Fall of 2006, 99.1% of the students succeeded as compared to 100.0% in Fall of 2007.
- *Fulltime faculty* taught 40.7% of the ECHs in 2006-07, as compared to 42.6% in 2005-06. Percent of Load Faculty taught 59.3% of the ECHs in 2006-07, as compared to 57.4% in 2005-06. No courses were taught by adjunct faculty over the past three years.

### *Program Profitability*

- The *Relative Profitability Index (RPI-T)* was at a six year high in 2003-04 (0.34). The RPI-T was slightly higher in 2006-07 (0.21) as compared to the previous year (0.17).

### *Program Improvements*

- *Capital Expenditures* for the Radiography program during the past three years totaled \$45,639. Program improvements made as a result of the capital

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expenditures included a DELL data projector, an AmRad X-ray machine, and a DELL computer.

#### *Academic Outcomes*

- The *2004-05 Academic Program Assessment Report* indicated that the Radiography graduates exceeded the mean score of 75% as used by the American Registry of Radiologic Technologist's (ARRT) National Board Exam (NBE) for certification requirements and the Florida Department of Health FDOH for licensure requirements in all MLO areas.
- The *2004-05 Academic Program Assessment Follow-up Report* was completed in December 2006 with all five action items successfully completed. The next assessment report is scheduled to be completed during the 2007-08 academic year.

#### *Stakeholder Perceptions*

- All the individual average content area scores for the *Student Survey of Instruction (SSI)* were above the traditional threshold (an average of 5.0) used by the College for evaluating seven-point satisfaction scales. These results suggest general overall satisfaction with the courses within the Radiography program; specifically, as they relate to faculty/student interaction, course organization, course presentation, and evaluation methodologies.
- A Radiography *advisory committee* meeting was held on April 22, 2008. The meeting consisted of class updates, discussions about ARRT test results, employment results, curriculum updates, student rotations, and equipment purchases and recommendations.
- *Recent Graduate surveys* were provided to the fifteen 2004-05 graduates of the Radiography program. Forty percent (6 of the 15) graduates surveyed responded to the survey. Notable results include:
  - 100.0% of recent graduate survey respondents, who were employed, were employed full-time.
  - 100.0% of recent graduate survey respondents had a current position related to their studies.
  - 83.3% of recent graduate survey respondents indicated their main goal in completing a degree or certificate at SPC was to 'Change career fields'; while the remaining 16.7% stated to 'Continue my education'.
  - 83.3% of recent graduate survey respondents indicated that their SPC degree allowed them to 'Change career fields'; 83.3% 'Earn more money'; 33.3% 'Continue my education'; and 16.7% 'Obtain employment'. [Note: The total may exceed 100% as this question allows multiple responses]
  - 66.7% of recent graduate survey respondents indicated that SPC did 'Exceptionally well' in helping them meet their goal, while 33.3% thought that SPC did 'Very well'.
  - For hourly employees, 25.0% of recent graduate survey respondents earned between \$25.00 or more per hour, 50.0% earned between \$20.00 and \$22.49 per hour, while the remaining 25.0% earned between \$17.50 and \$19.99 per hour.





- For salary employees, 100.0% of recent graduate survey respondents earned between \$40,000 and \$49,999 per year.
- 100.0% of recent graduate survey respondents would recommend SPC's Radiography program to another.
- Due to a midyear change in the survey format, only one survey respondent provided an evaluation of their college preparation. Since a single response can not accurately represent the entire program, graduate survey results about college preparation will not be reported.
- Four *Employer surveys* were sent out to employers based on the permission provided by recent Radiography graduates in the 2004-05 recent graduate survey. Fifty percent (2 of the 4) employers surveyed responded to the survey. Notable results include:
  - 100.0% of employers responding to the survey indicated they would hire another graduate from SPC.
  - 100.0% of employers responding to the survey had graduate employees who earned between \$20.00 and \$24.99 per hour.
  - An employer evaluation of RAD graduates' general education outcomes indicated high levels of satisfaction with graduates' general education outcomes. Seven outcomes received mean scores of 4.0, fifteen received mean scores of 3.5, while three outcomes received mean scores at a 3.0.

#### *Occupation Profile*

- *2005 median yearly income* for Radiography was \$45,900 in the United States, \$45,300 in the State of Florida.
- *Employment trend information* suggests a significant average annual increase (23% - 30%) in employment for the profession over the next 5 - 7 years for the country and state.
- The *Major Employers* of the Radiography program graduates are in various areas of the health field. The primary local employers of these graduates are hospitals, radiologists, and healthcare providers.

#### *State Graduates Outcomes*

- *State Graduates data* indicated that Almost two hundred and seventy (268) students completed a state Radiography program in 2005-06, of those two hundred and fifty (250) had some matching state data and were employed. Eighty-nine percent (89%) of those state graduates were employed at least a full quarter (earning at least minimum wage for 40 hours a week times 13 weeks). SPC's rate was slightly lower, with 82% of the graduates employed at least a full quarter.
- There were two hundred and fifty (250) students in the *Florida Education and Training Placement Information Program* (FETPIP) Pool (total number of individuals found employed, continuing education, or in the military), of those ninety-six percent (96%) were training-related (either with employment related to their training, continuing their education, or are in the military). SPC's graduates exceeded this rate, with a 100% placement rate.



### Program Director's Perspective: Issues, Trends, and Recent Successes

The Radiography Program is currently accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The JRCERT provides stringent guidelines that the program must adhere to in order to maintain compliance with their standards. There is a heavy emphasis on developing critical thinking skills within the program's curriculum and on outcomes based assessments.

The American Society of Radiologic Technologists (ASRT) provides our didactic curriculum. American Registry of Radiologic Technologists (ARRT) determines our clinical requirements and provides the national registry.

Since the program's inception in 1981, there have been a total of 6 graduates that have not passed the ARRT on their first attempt.

Changing from rolling to selective admissions has vastly improved our retention. Since the advent of selective admissions in 2007, program retention has continued to increase, achieving a four-year high of 96% with the class of 2008. This has also had a positive impact on the program's productivity and RPI.

We are fortunate to have a very active and diverse Advisory Committee membership. The program enjoys tremendous support from the Radiography community. One of our x-ray labs has been completely replaced and the other two have been refurbished. We have recently purchased a computed radiography (CR) reader.

Graduate and employer surveys are completed six to eight months after graduation. The overall graduate satisfaction reported by the class of 2006 was 98%, and the overall employer satisfaction was 94.7%.

Capital Expenditures for the Radiography program during the past three years totaled \$45,639. Program improvements made as a result of the capital expenditures included a DELL Data Projector with Memory Card, an AmRad X-ray machine, and a DELL computer. The DELL projector was purchased for didactic and lab instruction and is still currently in use today. The antiquated Xonics X-ray Lab was replaced with a modern AmRad X-ray Machine. This upgrade provides an opportunity for our students to work with modern equipment which is similar to what they will be exposed to within the clinical component of the program. The DELL computer is employed to run program specific simulation software for student use in courses throughout the curriculum.

#### *Program Action Plan*

- Program action plan created by the Provost and Program Director, and reviewed by the Advisory Board members, is located at the end of the document.



## SPC Mission Statement

The mission of St. Petersburg College is to provide accessible, learner-centered education for students pursuing selected baccalaureate degrees, associate degrees, technical certificates, applied technology diplomas and continuing education within our service area as well as globally in program areas in which the College has special expertise. As a comprehensive, multi-campus postsecondary institution, St. Petersburg College seeks to be a creative leader and partner with students, communities, and other educational institutions to deliver enriched learning experiences and to promote economic and workforce development. St. Petersburg College fulfills its mission led by an outstanding, diverse faculty and staff and enhanced by advanced technologies, distance learning, international education opportunities, innovative teaching techniques, comprehensive library and other information resources, continuous institutional self-evaluation, a climate for student success, and an enduring commitment to excellence.

## Introduction

In a holistic approach, the effectiveness of any educational institution is the aggregate value of the education it provides to the community it serves. For over seventy-five years, St. Petersburg College (SPC) has provided a wide range of educational opportunities and services to a demographically diverse student body producing tens of thousands of alumni who have been on the forefront of building this county, state, and beyond. This is due, in large part, to the College's institutional effectiveness.

## *Institutional Effectiveness*

Institutional Effectiveness is the integrated, systematic, explicit, and documented process of measuring performance against the SPC mission for the purposes of continuous improvement of academic programs, administrative services, and educational support services offered by the College.

Operationally, the institutional effectiveness process ensures that the stated purposes of the College are accomplished. In other words did the institution successfully execute its mission, goals, and objectives? At SPC, the Offices of Planning, Budgeting, and Research work with all departments and units to establish measurable statements of intent that





are used to analyze effectiveness and to guide continuous quality improvement efforts. Each of St. Petersburg College's units is required to participate in the institutional effectiveness process.

The bottom-line from SPC's institutional effectiveness process is improvement. Once SPC has identified what it is going to do then it acts through the process of teaching, researching, and managing to accomplish its desired outcomes. The level of success of SPC's actions is then evaluated. A straightforward assessment process requires a realistic consideration of the intended outcomes that the institution has set and a frank evaluation of the evidence that the institution is achieving that intent.

There is no single right or best way to measure success, improvement, or quality. Nevertheless, objectives must be established, data related to those objectives must be collected and analyzed, and the results of those findings must be used to improve the institution in the future. The educational assessment is a critical component of St. Petersburg College's institutional effectiveness process.

#### *Educational Assessment*

Educational programs use a variety of assessment methods to improve their effectiveness. Assessment and evaluation measures are used at various levels throughout the institution to provide provosts, deans, program managers, and faculty vital information on how successful our efforts have been.

While the focus of a particular educational assessment area may change, the assessment strategies remain consistent and integrated to the fullest extent possible. The focus for Associate in Arts degrees is targeted for students continuing on to four-year degree programs as opposed to the Associate in Applied Science, Associate in Science, and Baccalaureate programs which are targeted towards students seeking employable skills. The General Education based assessments focus on the general learning outcomes from all degree programs, while Program Review looks at the viability of the specific programs.

The individual reports unique by their individual nature are nevertheless written to address how the assessments and their associated action plans



have improved learning in their program. The College has developed an Educational Assessment Website (<https://it.spcollege.edu/edoutcomes/>) to serve as repository for all SPC's educational outcomes reports and to systematically manage our assessment efforts.

#### *Program Review Process*

The program review process at St. Petersburg College is a collaborative effort to continuously measure and improve the quality of educational services provided to the community. The procedures described below go far beyond the "periodic review of existing programs" required by the State Board of Community Colleges; and exceeds the necessary guidelines within the Southern Association of Community Colleges and Schools (SACS) review procedures.

State guidelines require institutions to conduct program reviews every five years as mandated in chapter 1001.02(6) of the Florida Statutes, the State Board of Education (formerly the Florida Board of Education) must provide for the review of all academic programs.

*(6) ...The programs shall be reviewed every 5 years or whenever the state board determines that the effectiveness or efficiency of a program is jeopardized. The State Board of Education shall define the indicators of quality and the criteria for program review for every program. Such indicators include need, student demand, industry-driven competencies for advanced technology and related programs, and resources available to support continuation. The results of the program reviews must be tied to the university and community college budget requests.*

In addition, Rule 6A-14.060 (5) states that each community college shall:

*(5) ...Develop a comprehensive, long-range program plan, including program and service priorities. Statements of expected outcomes shall be published, and facilities shall be used efficiently to achieve such outcomes. Periodic evaluations of programs and services shall use placement and follow-up data, shall determine whether expected*



*outcomes are achieved, and shall be the basis for necessary improvements.*

Recently, SPC reduced the recommended program review timeline to three years to coincide with the long-standing three-year academic program assessment cycle, producing a more coherent and integrated review process. Figure 1 represents the relationship between program assessment and program reviewing during the three-year assessment cycle.

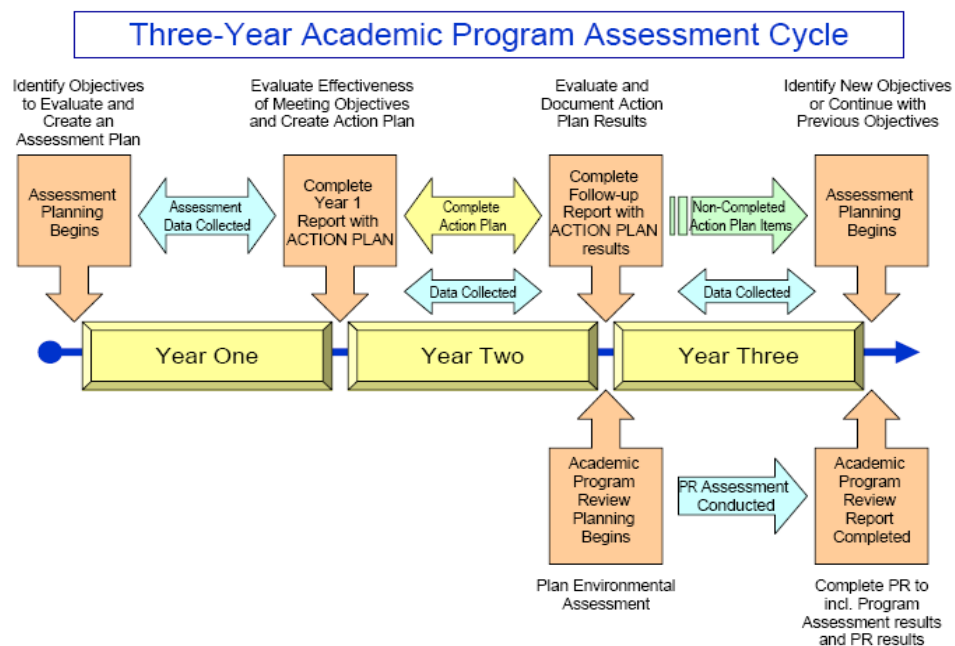


Figure 1: Three-Year Academic Program Assessment Cycle

### Program Description

Radiographers are important members of the health care team, dedicated to optimum patient care. Their primary role is to perform the technical procedures necessary to produce diagnostic x-ray studies, administer quality patient care and to assist the radiologist physician. Although most radiographers are employed by hospitals or clinics, there are many positions available in private physicians' offices and industry. Graduates may apply to take the American Registry of Radiologic Technologists





(ARRT) examination as well as the State of Florida examination for the general radiographer.

*Degree Offered*

An Associate in Science Degree in Radiography is offered at SPC.

For a complete listing of all courses within the Radiography program, please see Appendix A.

*Accreditation*

The Radiography Program is currently accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT).

The JRCERT provides stringent guidelines that the program must adhere to in order to maintain compliance with their standards.





## Program Performance

### *Actual Course Enrollment*

Actual Course Enrollment is calculated using the sum of actual student enrollment for the courses within the program (Academic Organization Code). This number is a duplicated headcount of students enrolled in the program's core courses, and does not reflect the actual number of students enrolled in the A.S. program or its associated certificates (if applicable). Spring has had the highest Actual Course Enrollment for the Radiography program over the last three years. Enrollment showed an increase in the Spring and Summer semesters this year as shown by Figure 2.

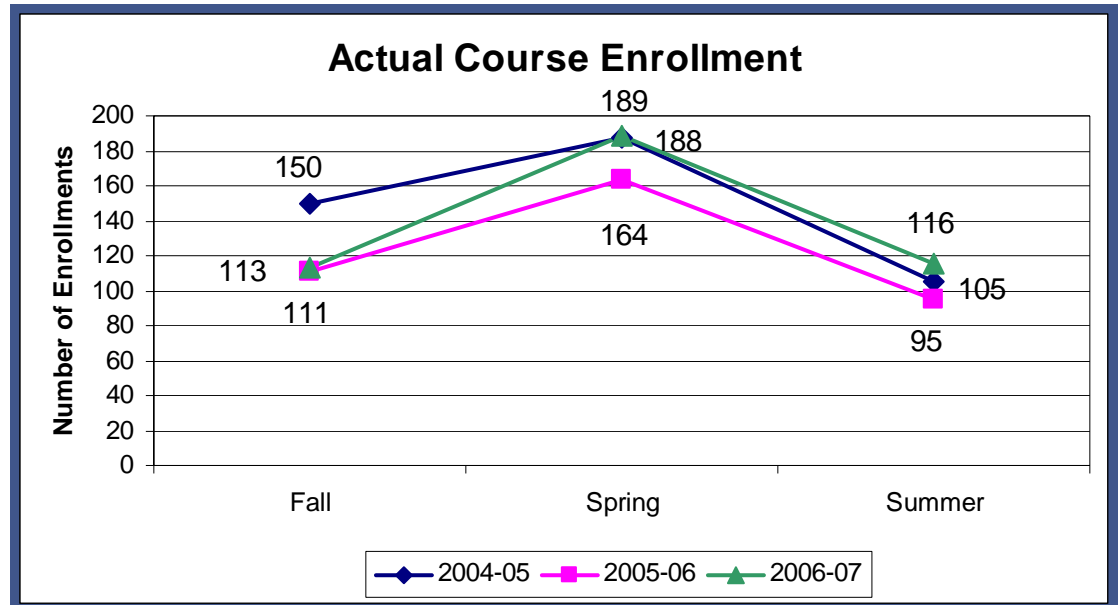


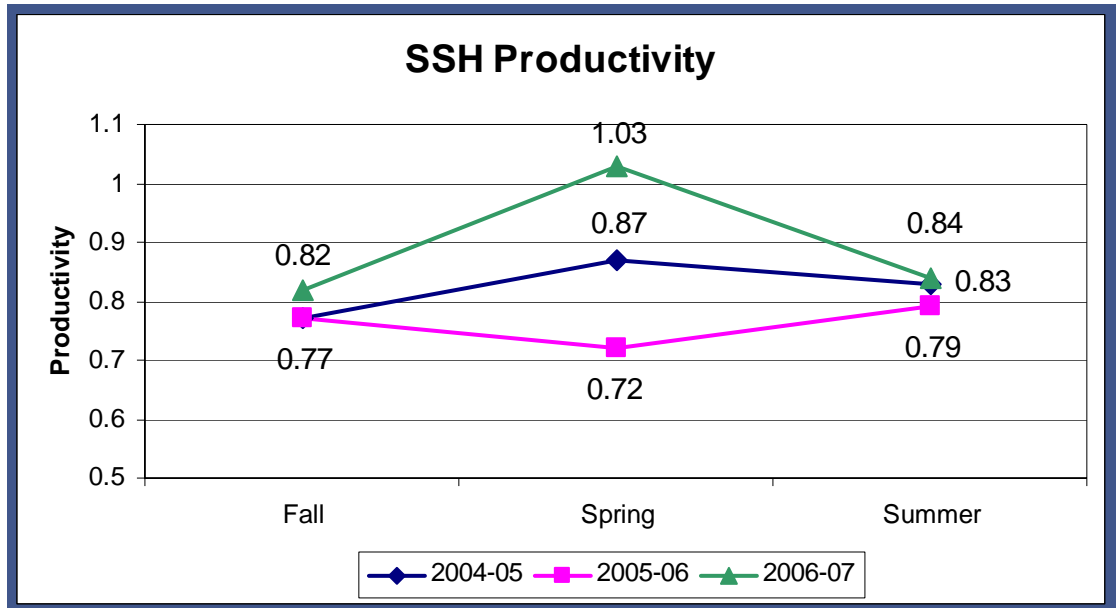
Figure 2: Actual Course Enrollment

Source: PeopleSoft Student Administration System: Course Management Summary Report (S\_CMSUMM)



### *Productivity*

Student Semester Hour (SSH) Productivity is calculated by dividing actual SSH by the budgeted SSH. The SSH Productivity for 2006-07 has been the highest of the previous three years even exceeding a value of one (1.03) for the Spring semester as shown by Figure 3.



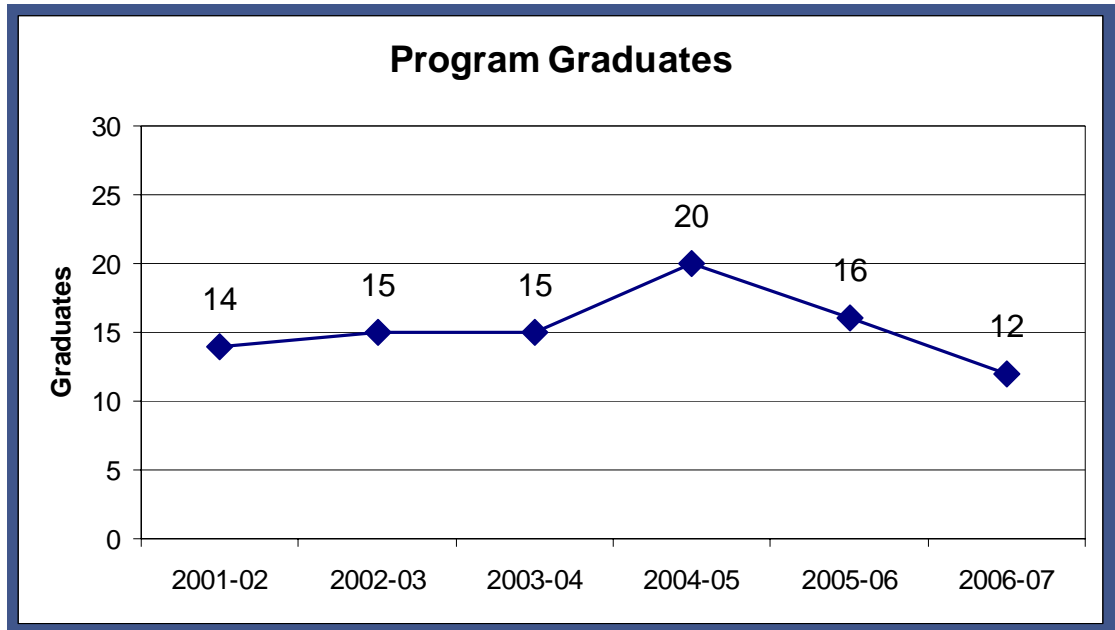
*Figure 3: SSH Productivity*

Source: PeopleSoft Student Administration System: Course Management Summary Report (S\_CMSUMM)



### *Program Graduates*

The Radiography program reached a six-year high of 20 graduates in 2004-05, but later declined with 16 graduates in 2005-06 and 12 graduates in 2006-07 as shown in Figure 4.



*Figure 4: Program Graduates*

Source: 2006-07 SPC Factbook, Table 31



### *Grade Distributions*

To provide a reference for program performance at the classroom level, grade distributions are provided. Table 1 includes the percentage of students receiving an A, B, C, D, or F in the program core courses. The information was compiled from the college wide grade distribution report generated at the end of the session. Some course data, such as dual credit courses generally do not end at the same time as the regular campus courses and may be omitted. In addition, the number of enrollments is a duplicated headcount where students are counted for each class registered, however, only A, B, C, D, and F grades are included in the calculations.

*Table 1*  
*Program Core Course Grade Distributions*

Semester	Grade Distributions				
	A	B	C	D	F
Spring 2006	45.9%	31.8%	16.2%	1.4%	4.7%
Spring 2007	60.6%	24.1%	14.1%	0.6%	0.6%
Fall 2006	57.1%	14.3%	27.7%	0.0%	0.9%
Fall 2007	61.1%	15.3%	23.7%	0.0%	0.0%

Source: Collegewide Grade Distribution Report (Generated at the end of the session)





Figure 5 provides a visual representation of the grade distributions for those students receiving a grade of A, B, or C.

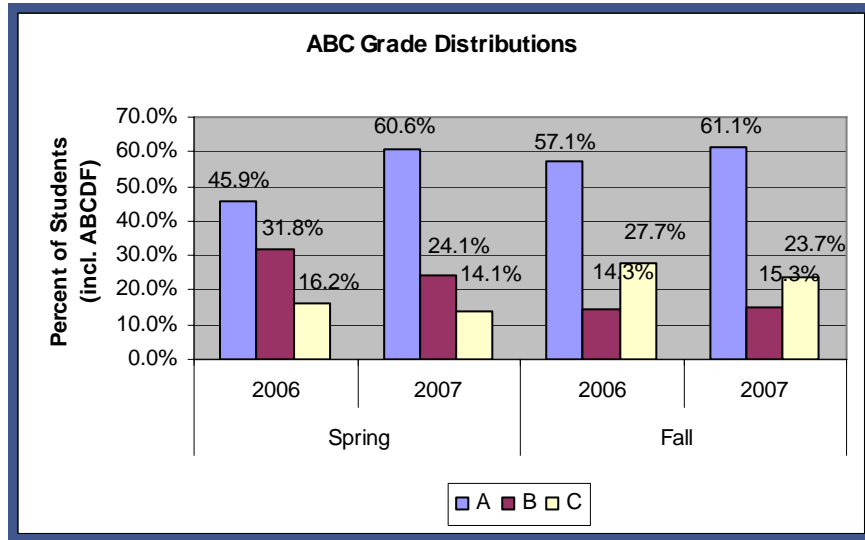


Figure 5: ABC Grade Distributions

Source: Collegewide Grade Distribution Report (Generated at the end of the session)



A classroom success rate was also calculated for the program. Classroom success is defined as the percent of students successfully completing the course and once again only A, B, C, D, and F grades are included in the calculations. The vast majority of students in the program succeeded in the courses as shown by Figure 6. In Spring of 2006, 93.9% of the students were successful, as compared to 98.8% in Spring of 2007. In Fall of 2006, 99.1% of the students succeeded as compared to 100.0% in Fall of 2007.

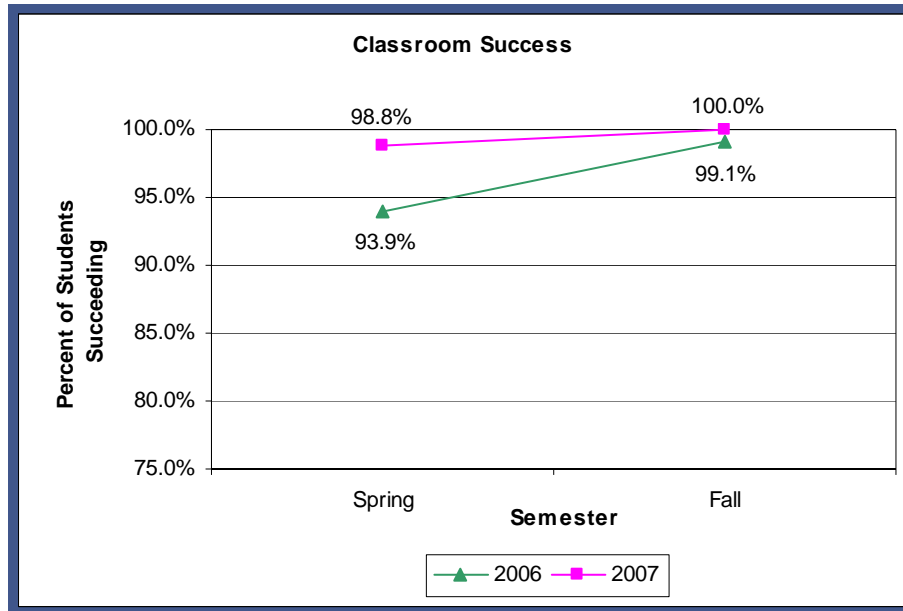


Figure 6: Classroom Success

Source: Collegewide Grade Distribution Report (Generated at the end of the session)



### *Fulltime/Adjunct Faculty Ratio*

Table 2 displays the number and percentage of Radiography program equated credit hours (ECHs) taught by the individual faculty classifications. As shown, Fulltime Faculty taught 40.7% of the ECHs in 2006-07, as compared to 42.6% in 2005-06. Percent of Load Faculty taught 59.3% of the ECHs in 2006-07, as compared to 57.4% in 2005-06.

*Table 2*  
*Equated Credit Hours by Faculty Classification*

	Fulltime Faculty		Percent of Load Faculty		Adjunct Faculty	
	Number of ECHs	% of Classes Taught	Number of ECHs	% of Classes Taught	Number of ECHs	% of Classes Taught
Fall 2004-05	35.1	67.37%	17.0	32.63%	0.0	0.00%
Spring 2004-05	28.4	70.00%	12.2	30.00%	0.0	0.00%
Summer 2004-05	21.6	51.07%	20.7	48.93%	0.0	0.00%
<b>2004-05 Total</b>	<b>85.0</b>	<b>63.06%</b>	<b>49.8</b>	<b>36.94%</b>	<b>0.0</b>	<b>0.00%</b>
Fall 2005-06	24.0	54.87%	19.7	45.13%	0.0	0.00%
Spring 2005-06	19.3	53.03%	17.1	46.97%	0.0	0.00%
Summer 2005-06	6.0	16.83%	29.7	83.17%	0.0	0.00%
<b>2005-06 Total</b>	<b>49.2</b>	<b>42.56%</b>	<b>66.4</b>	<b>57.44%</b>	<b>0.0</b>	<b>0.00%</b>
Fall 2006-07	19.0	44.71%	23.5	55.29%	0.0	0.00%
Spring 2006-07	18.0	48.06%	19.5	51.94%	0.0	0.00%
Summer 2006-07	10.8	28.88%	26.6	71.12%	0.0	0.00%
<b>2006-07 Total</b>	<b>47.8</b>	<b>40.73%</b>	<b>69.6</b>	<b>59.27%</b>	<b>0.0</b>	<b>0.00%</b>

Source: PeopleSoft Student Administration System: Faculty/Adjunct Ratio Report (S\_FACRAT)



The Fulltime/Adjunct Faculty Ratio is calculated by dividing a program's adjunct's ECHs by the sum of the Adjunct's, Percent of Load's, and Fulltime Faculty's ECHs. Figure 7 displays the Fulltime/Adjunct Faculty Ratio information for the last three academic years. No courses were taught by adjunct faculty over the past three years, as shown in Table 2. The three-semester average (0.0%) for 2006-07 exceeded the College's general 65/35 Fulltime/Adjunct Faculty Ratio guideline.

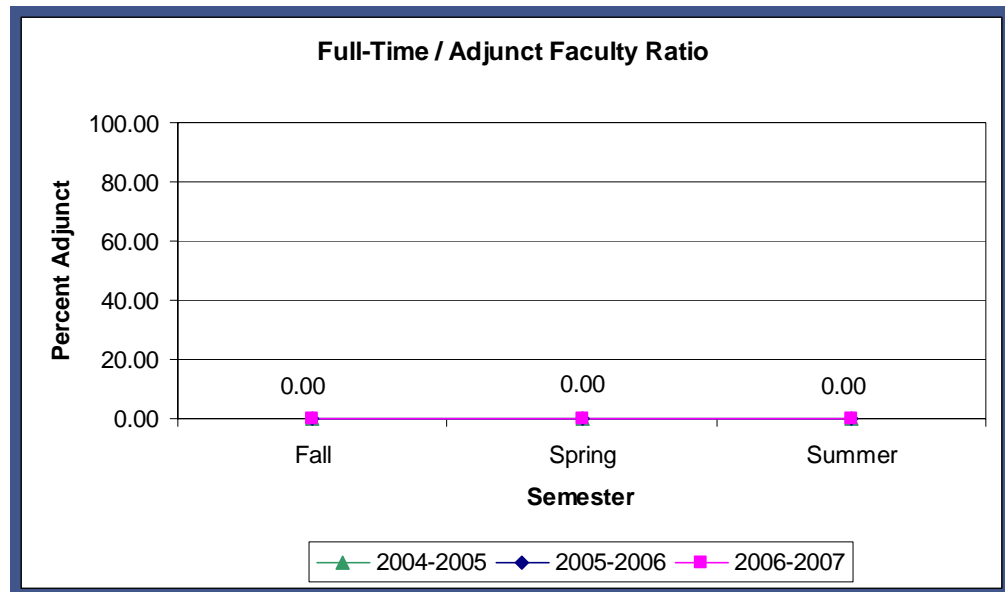


Figure 7: Full-time/Adjunct Faculty Ratio

Source: PeopleSoft Student Administration System: Faculty/Adjunct Ratio Report (S\_FACRAT)





## Program Profitability

### *Relative Profitability Index (RPI-T)*

Relative Profitability Index (RPI-T) is a measure of program profitability. It is calculated by dividing a program's income by the sum of its personnel expenses and current expenses. Only Fund 10 financials are used in the calculation of RPI-T; specifically, program revenues (GL 400000), personnel expenses (GL 500000), and current expenses (GL 600000).

Program revenues (GL 400000) can include (1) student application fees and tuition, (2) out of state fees, and (3) gifts from alumni and charitable organizations.

Personnel expenses (GL 500000) can include (1) personnel salary expenses for program management, and instructional staff, (2) personnel salary expenses for OPS and student assistants, and (3) personnel benefits. Personnel assigned to multiple programs may have partial personnel expenses assigned to an individual program.

Current expenses (GL 600000) can include operating expenses for (1) travel, (2) goods and services, and (3) materials and supplies. Current expenses can also include scholarship and fee waivers.





The RPI-T in the Radiography program had a six-year high in 2003-04 (0.34) as shown in Figure 8. The program's 2006-07 RPI-T value of 0.21 was below the college-wide target of 0.53 (SPC mean).

To provide a comparison of the program's RPI-T to other similar programs, three comparative measures were also calculated. The 2006-07 mean RPI-T for Health disciplines was 0.38, the 2006-07 mean RPI-T for Health center programs was 0.38, and the 2006-07 mean RPI-T for programs which offered less than 5% of their courses online was 0.33.

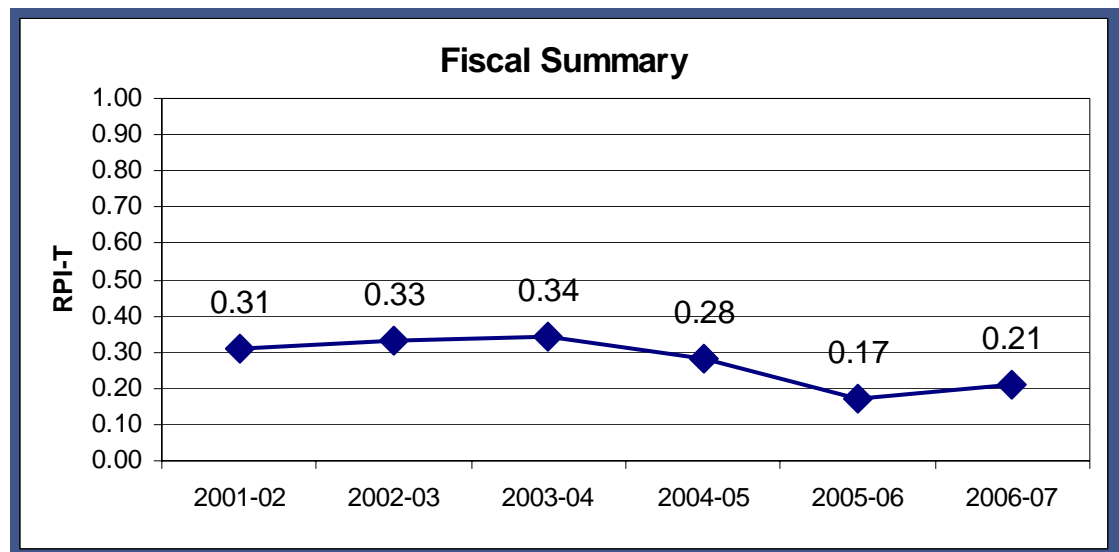


Figure 8: Fiscal Summary

Source: PeopleSoft Financial Production System: Summary of Monthly Organization Budget & Actuals Status Report (ORGBUDA1) from End of Fiscal Year





## Program Improvements

### *Capital Expenditures*

Capital Expenditures (Fund 10 & 16) for the Radiography program (Org: 11230105) during the past three years totaled \$45,639 as shown on Table 3. Program improvements made as a result of the capital expenditures included a DELL data projector, an AmRad X-ray machine, and a DELL computer.

Table 3

Radiography Capital Expenditures

Capital Expenditures			
Year	Capital Outlay	Account	Purchase Description
2004-05	2,236	700000	DELL Data Projector with Memory Card
2005-06	41,863	700000	AmRad X-ray Machine
2006-07	1540	700000	DELL Computer
<b>Total</b>	<b>45,639</b>		

Source: PeopleSoft Financial Production System: Summary of Monthly Organization Budget & Actuals Status Report (ORGBUDA1) from End of Fiscal Year





## Academic Outcomes

As part of SPC quality improvement efforts, academic assessments are conducted on each AAS/AS program every three years to evaluate the quality of the program's educational outcomes. The Radiography program was evaluated through an Academic Program Assessment Report (APAR) in 2004-05. Each of the program's five Major Learning Outcomes (MLOs) was evaluated during the assessment. Each of the five MLOs is listed below:

1. The student will develop an understanding of radiation protection at the levels of recall, application, and analysis.
2. The student will develop an understanding of equipment operation and maintenance at the levels of recall, application, and analysis.
3. The student will develop an understanding of image production and evaluation at the levels of recall, application, and analysis.
4. The student will develop an understanding of radiographic procedures at the levels of recall, application, and analysis.
5. The student will develop an understanding of patient care at the levels of recall, application, and analysis.

### *Means of Assessment:*

The Radiography program used the results of the American Registry of Radiologic Technologist's (ARRT) National Board Exam (NBE) to evaluate the students. The results of this exam are used by the Florida Department of Health (FDOH) to grant licensure. Radiography graduates take the NBE within 90 days of successfully meeting the graduation requirements for the program. The individual results from the ARRT's NBE, for each graduating class, have been tabulated using statistical software. The mean score from the radiation protection section of the exam was used as the criteria for success. The class average should be above the mean score of 75% as used by the ARRT for certification requirements and the FDOH for licensure requirements.

Data was collected from 2001 through 2003, and the data findings for each MLO, are displayed in Table 4. The Radiography graduates exceeded the mean score of 75% as used by the ARRT for certification requirements and the FDOH for licensure requirements in all MLO areas.



Table 4

American Registry of Radiologic Technologist's (ARRT) National Board Examination (NBE) Results

Major Learning Objective Assessed	American Registry of Radiologic Technologist's (ARRT) National Board Exam (NBE) Assessment Results					
	2001 (N=14)		2002 (N=17)		2003 (N=13)	
	SPC Mean	% Above ARRT & FDOH Requirements	SPC Mean	% Above ARRT & FDOH Requirements	SPC Mean	% Above ARRT & FDOH Requirements
MLO 1	85%	13.33%	85%	13.33%	86%	14.67%
MLO 2	80%	6.67%	81%	8.00%	82%	9.33%
MLO 3	87%	16.00%	84%	12.00%	84%	12.00%
MLO 4	87%	16.00%	87%	16.00%	88%	17.33%
MLO 5	89%	18.67%	88%	17.33%	90%	20.00%

Source: Academic Outcomes from 2004-05 Academic Program Assessment Report (APAR)

Five action plan items were created as a result of the 2004-05 assessment results. All five action items were successfully completed and the results published in the December 2006 follow-up report. The next assessment report is scheduled to be completed during the 2007-08 academic year.





## Stakeholder Perceptions

### *Student Survey of Instruction (SSI)*

Each Fall and Spring semester, St. Petersburg College (SPC) administers the Student Survey of Instruction. Students are asked to provide feedback on the quality of their instruction using a 7-point scale where 7 indicates the highest rating and 1 indicates the lowest rating.

Several variations of the SSI survey exist including lecture, non-lecture, clinical, and eCampus (on-line) versions. The purpose of the SSI survey is to acquire information on student perception of the quality of courses, faculty, and instruction, and to provide feedback information for improvement.

The survey questions are grouped into four categories; faculty/student interaction, organization, presentation, and evaluation, as defined below:

- **Faculty/Student Interaction** - focuses on how successful the faculty was in encouraging students to excel, the time spent on relevant course material, and responding to concerns and questions both inside and outside of the classroom.
- **Organization** - deals with clear instructions, defined objectives, relevant course materials, and whether the assignments were challenging.
- **Presentation** - focuses specifically on the instructor and their preparation for the course, enthusiasm for course, time spent on course related activities, ability to speak clearly and distinctly, thorough explanation of the subject matter, and assignment of material throughout the term.
- **Evaluation** - focuses on course expectations and grading policies, applying the stated grading policies consistently and impartially, and giving applicable course assignments including quizzes and exams.



*Lecture.* The lecture version of the survey is distributed to all students enrolled in traditional classroom sections within the College. The average scores are all well above the traditional threshold (an average of 5.0) used by the College for evaluating seven-point satisfaction scales during all four semesters. The average survey results by semester and content area are shown by Figure 9.

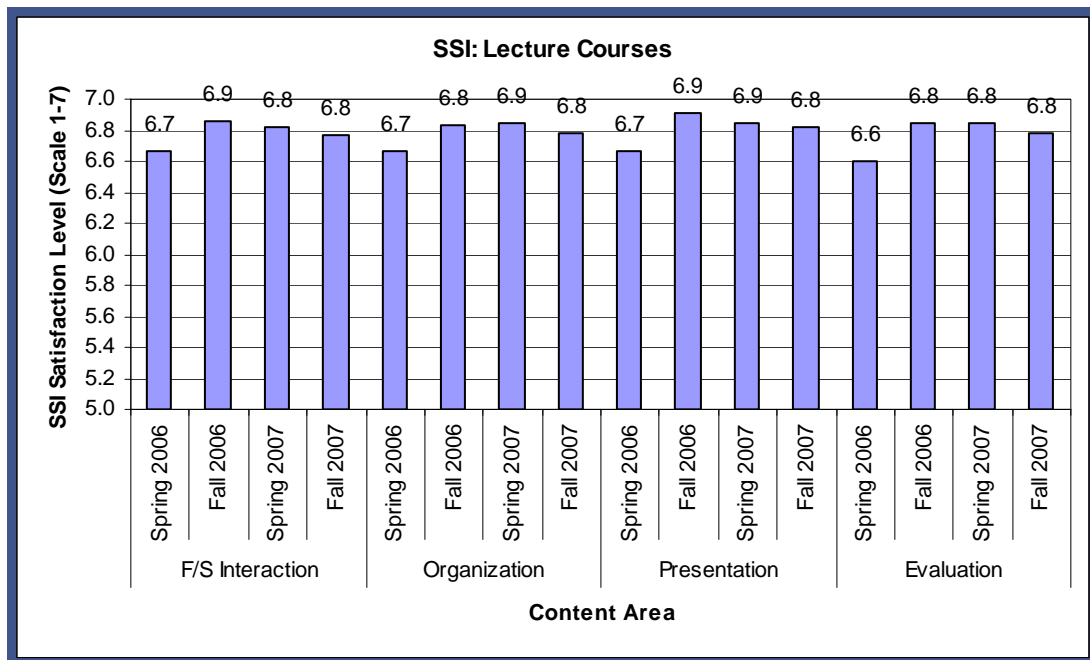


Figure 9: SSI Lecture Courses

Source: PeopleSoft Student Administration System: Query S\_SSI\_CHRT\_QRY\_CAMPUS





*Non-Lecture.* Lab courses and self-paced or directed individual study use the non-lecture version of the survey. The average scores are all well above the traditional threshold (an average of 5.0) used by the College for evaluating seven-point satisfaction scales during all four semesters. The average survey results by semester and content area are shown by Figure 10.

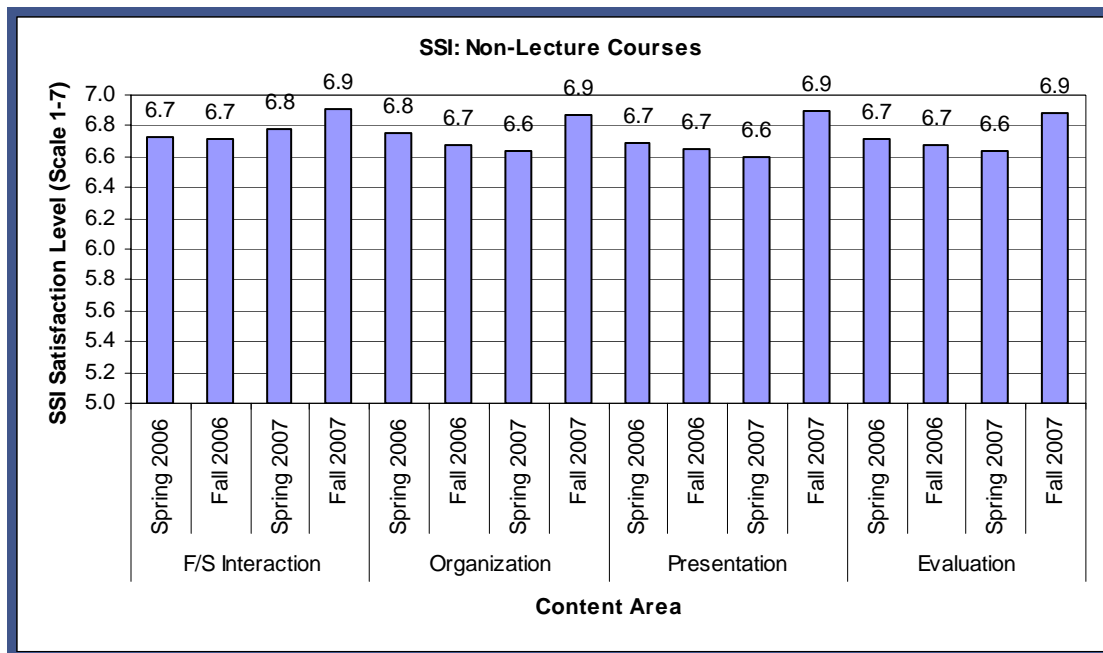


Figure 10: SSI Non-Lecture Courses

Source: PeopleSoft Student Administration System: Query S\_SSI\_CHRT\_QRY\_CAMPUS

*Clinical.* The clinical version of the survey is distributed to all students enrolled in a clinical specific class. There were no clinical classes in the Radiography program during the time of the review.

*eCampus.* The eCampus or on-line version of the SSI survey is electronically distributed to all students enrolled in on-line courses at the College. The Project Eagle Research Capsule #4 provides information on the difference in the wording of the questions (<http://www.spcollege.edu/eagle/research/perc/perc4.htm>). There were





no eCampus classes in the Radiography program during the time of the review.

*Summary.* All the individual average content area scores were above the traditional threshold (an average of 5.0) used by the College for evaluating seven-point satisfaction scales. These results suggest general overall satisfaction with the courses within the Radiography program; specifically, as they relate to faculty/student interaction, course organization, course presentation, and evaluation methodologies.

#### *Technical Education Advisory Committee*

Community input and participation is an important component of the educational process at the College. The technical education advisory committees are an example of community input. Advisory committees meet a minimum of twice annually with additional meetings as needed for good program coordination.

Advisory committee members are appointed by the College President to serve a one-year term of office and must have a demonstrated competency in the program specialty area or an understanding of the program and of the community at large. An exception to the above may be a lay person directly involved in a related program field such as counseling, public relations, or administration of a business or industry.

Specific Duties of Advisory Committees are to:

1. serve as a communication channel between the college and the community;
2. determine specific skills and suggest related and technical information for the program;
3. suggest ways for improving public relations and articulation of the program with other institutions;
4. assist in recruiting, providing internships, and in placing qualified graduates in appropriate jobs;
5. keep the program personnel informed on changes in labor market, specific needs (competencies), and surpluses;
6. recommend curriculum revisions as necessary to comply with current trends;



7. assist in assessing the program needs in terms of the entire community (long-range planning);
8. assist program personnel in searching for sources of funding for scholarships, equipment, etc.;
9. in general, to advise, recommend, and assist in assuring a quality program as determined by community needs; and
10. discuss proposed equipment purchases in excess of \$9,999.99.

*Recent Meeting Summary.*

A Radiography advisory committee meeting was held on April 22, 2008. The meeting consisted of class updates, discussions about ARRT test results, employment results, curriculum updates, student rotations, and equipment purchases and recommendations.

*First Year Class Update.* Twenty-three students matriculated into the program this past January.

*Second Year Class Update.* Nineteen of twenty-three students that matriculated into the program in January of 2007 remain for a retention rate of 83%.

*ARRT Test Results.* Sixteen of eighteen graduates passed the ARRT on their first attempt for an eighty-nine percent pass rate.

*Employment Results.* All eighteen graduates from this past December were able to find gainful employment within the field.

*Computed Tomography.* This curriculum change has been successfully implemented into Advanced Radiography.

*Digital Radiography.* This requirement is in the process of being added to Imaging I, Imaging II, and Radiation Physics.

*Palms of Pasadena Hospital.* Initial student rotations began at this facility earlier this semester. The clinical coordinator will closely monitor this site in order to ensure that it continues to be a viable option for student clinical rotations.



*Equipment Purchases.*

- The Konica CR Reader Monitor Platform was purchased in order to allow our CR Reader to be mobile.
- A 14 x 17" CR Cassette was purchased to be used for experiments during our Imaging Labs.

*Equipment Recommendations.* The committee recommended that the program purchase a C-Arm Machine in order to ensure that our students acquire some experience with them prior to matriculating into the clinical component of the program. The price of a remanufactured machine is approximately \$30,000 while a new one will cost in the neighborhood of \$130,000.



### *Advisory Committee Recommendations*

Two recommendations were made at the Radiography advisory committee meeting held on April 22, 2008. These recommendations and SPC's responses are presented in Table 5.

*Table 5*  
*Advisory Board Recommendations*

Recommendations for 2007-08	SPC Response
Sixteen of eighteen graduates passed the ARRT on their first attempt for an eighty-nine percent pass rate. Even though the program's pass rate is above our benchmark of seventy-five percent, the committee recommended the implementation of an online review that must be completed by each student prior to graduation. The cost of this course is \$80 per student and it will be paid for by each individual student.	This online review will be added as a graduation requirement for Advanced Radiography.
The committee recommended that the program purchase a C-Arm Machine in order to ensure that our students acquire some experience with them prior to matriculating into the clinical component of the program. The price of a remanufactured machine is approximately \$30,000 while a new one will cost in the neighborhood of \$130,000.	This request will be reflected in the program's unit plan and an official quote for both a new and remanufactured machine will be acquired.

The complete committee minutes and recommendations along with the minutes and recommendations from previous meetings are located in Appendices B, C, and D.





### *Recent Graduate Survey Information*

Fifteen Alumni Surveys were provided to the 2005-06 graduates of the Radiography program. Responses were received from six A. S. graduates.

Forty percent (6 of the 15) graduates surveyed responded to the survey. After receiving permission from the respondents to contact their employers, four employer surveys were sent out. Not all respondents answered every survey question; therefore, the percentages listed below represent the responses to each survey question in relation to the total number of responses received for each question.

Notable results include:

- 100.0% of recent graduate survey respondents, who were employed, were employed full-time.
- 100.0% of recent graduate survey respondents had a current position related to their studies.
- 83.3% of recent graduate survey respondents indicated their main goal in completing a degree or certificate at SPC was to 'Change career fields'; while the remaining 16.7% stated to 'Continue my education'.
- 83.3% of recent graduate survey respondents indicated that their SPC degree allowed them to '*Change career fields*'; 83.3% '*Earn more money*'; 33.3% '*Continue my education*'; and 16.7% '*Obtain employment*'. [Note: The total may exceed 100% as this question allows multiple responses]
- 66.7% of recent graduate survey respondents indicated that SPC did 'Exceptionally well' in helping them meet their goal, while 33.3% thought that SPC did 'Very well'.
- For hourly employees, 25.0% of recent graduate survey respondents earned \$25.00 or more per hour, 50.0% earned between \$20.00 and \$22.49 per hour, while the remaining 25.0% earned between \$17.50 and \$19.99 per hour.
- For salary employees, 100.0% of recent graduate survey respondents earned between \$40,000 and \$49,999 per year.
- 100.0% of recent graduate survey respondents would recommend SPC's Radiography program to another.
- Due to a midyear change in the survey format, only one survey respondent provided an evaluation of their college preparation. Since a single response can not accurately



represent the entire program, graduate survey results about college preparation will not be reported.

### *Employer Survey Information*

Four surveys were sent to employers based on the permission provided by 2005-06 RAD graduates in the recent alumni survey. Fifty percent (2 of the 4) employers surveyed responded to the survey.

Notable results include:

- 100.0% of employers responding to the survey indicated they would hire another graduate from SPC.
- 100.0% of employers responding to the survey had graduate employees who earned between \$20.00 and \$24.99 per hour.
- An employer evaluation of Radiography graduates' general education outcomes is displayed in Table 6. Employers indicated high levels of satisfaction with graduates' general education outcomes. Seven outcomes received mean scores of 4.0, fifteen received mean scores of 3.5, while three outcomes received mean scores at a 3.0.

*Table 6*

*Employer Competency Ratings for Recent Radiography Program Graduates*

<i>General Education Outcomes (Five point rating scale with five being the highest)</i>	<i>Item Ratings</i>			
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N/A*</i>
<i>Communicate clearly and effectively with others through:</i>				
Speaking	2	4.0	1.41	---
Listening	2	4.0	1.41	---
Reading	2	4.0	1.41	---
Writing	2	4.0	1.41	---
<i>Use mathematical and computational skills:</i>				
Comfortable with mathematical calculations	1	3.0	---	1
Uses computational skills appropriately	1	3.0	---	1
Accurately interprets mathematical data	1	3.0	---	1
<i>Use the following forms of technology:</i>				
E-mail	2	3.5	0.71	---
Word Processing	2	3.5	0.71	---





<i>General Education Outcomes</i> (Five point rating scale with five being the highest)	<i>Item Ratings</i>			
	<i>N</i>	<i>Mean</i>	<i>SD</i>	<i>N/A*</i>
Spreadsheets	2	3.5	0.71	---
Databases	2	3.5	0.71	---
Internet Research	2	3.5	0.71	---
<i>Think logically and critically to solve problems:</i>				
Gathers and assesses relevant information	2	3.5	2.12	---
Inquires and interprets information	2	3.5	2.12	---
Organizes and evaluates information	2	3.5	2.12	---
Analyzes and explains information to others	2	3.5	2.12	---
Uses information to solve problems	2	3.5	2.12	---
<i>Work effectively with others in a variety of settings:</i>				
Participates as team player (e.g., groups projects)	2	4.0	1.41	---
Works well with individuals from diverse backgrounds	2	4.0	1.41	---
Uses ethical courses of action	2	3.5	2.12	---
Demonstrates leadership skills	2	4.0	1.41	---
<i>Appreciate the importance of lifelong learning:</i>				
Shows interest in career development	2	3.5	2.12	---
Open to new ideas and challenges	2	3.5	2.12	---
Willing to take on new responsibilities	2	3.5	2.12	---
Pursues additional educational opportunities	2	3.5	2.12	---

*\*The survey allowed employers to select N/A if a competency was not applicable for an employee.*





## Occupation Profile

### *Occupation Description*

The occupation description used by the Bureau of Labor Statistics is shown below:

*Maintain and use equipment and supplies necessary to demonstrate portions of the human body on x-ray film or fluoroscopic screen for diagnostic purposes.*

*Sample of reported job titles: Radiologic Technician (RT), X-Ray Technician (X-Ray Tech)*

### *US, State, and Area Wage Information*

The distribution of 2005 wage information for the Radiography program is located in Table 7. The median yearly income for Radiography program was \$45,900 in the United States, and \$45,300 in the local area. The wage information is divided by percentiles for hourly and yearly wages. This information is also separated by location.

Table 7

*Wage Information for Radiologic Technician and X-Ray Technician*

Location	Pay Period	2005				
		10%	25%	Median	75%	90%
United States	Hourly	\$15.04	\$18.39	\$22.09	\$26.49	\$31.36
	Yearly	\$31,300	\$38,300	\$45,900	\$55,100	\$65,200
Tampa-St. Petersburg-Clearwater, FL MSA	Hourly	\$15.05	\$18.21	\$21.80	\$25.56	\$28.37
	Yearly	\$31,300	\$37,900	\$45,300	\$53,200	\$59,000

Source: Bureau of Labor Statistics, Occupational Employment Statistics Survey; Florida Agency for Workforce Innovation



### *National, State, and County Trends*

Employment trend information is included in Table 8 and divided by country and state. A significant average annual increase (23% - 30%) in employment for the profession over the next 5 - 7 years for the country and state is shown.

*Table 8  
State and National Trends*

United States	Employment		Percent Change	<u>Job Openings</u> <sup>1</sup>
	2004	2014		
Radiologic technologists and technicians	182,000	224,200	+ 23 %	7,620
Florida	Employment		Percent Change	<u>Job Openings</u> <sup>1</sup>
	2002	2012		
Radiologic technologists and technicians	12,180	15,860	+ 30 %	600

<sup>1</sup>Job Openings refers to the average annual job openings due to growth and net replacement.

Note: The data for the State Trends and the National Trends are not directly comparable. The projections period for the State Trends is 2002-2012, while the projections period for the Country and County Trends is 2004-2014.

Source: Bureau of Labor Statistics, Office of Occupational Statistics and Employment Projections; Florida Employment Projections



### *Major Employers*

Graduates of SPC's Radiography program are employed in various areas of the health field. The primary local employers of these graduates are hospitals, radiologists, and healthcare providers as depicted in Table 9.

*Table 9*  
*Major Employers*

Employers of Radiography Graduates
Morton Plant Mease Hospital
Price, Hoffman and Stone Radiology
St. Anthony's Hospital
Bay Care Health Systems
Bayfront Medical Center
Largo Medical Center
Coastal Orthopedic
MOI-Bay Care
VA Medical Center at Bay Pines
Albany Medical Center Hospital

Source: 2007-08 SPC Factbook, Appendix B





## State Graduates Outcomes

To provide reference information for the employment trend data, program graduate state outcome data is provided for all academic programs included within Radiography.

Almost two hundred and seventy (268) students completed a state Radiography program in 2005-06, of those two hundred and fifty (250) had some matching state data and were employed. Eighty-nine percent (89%) of those state graduates were employed at least a full quarter (earning at least minimum wage for 40 hours a week times 13 weeks). SPC's rate was slightly lower, with 82% of the graduates employed at least a full quarter as depicted in Table 10.

There were two hundred and fifty (250) students in the Florida Education and Training Placement Information Program (FETPIP) Pool (total number of individuals found employed, continuing education, or in the military), of those ninety-six percent (96%) were training-related (either with employment related to their training, continuing their education, or are in the military). SPC's graduates exceeded this rate, with a 100% placement rate as depicted in Table 10.



*Table 10*  
Radiography Program Graduates 2005-06 Outcomes by Florida Community College

Florida Community College	Total Completers	# Found Employed	# Employed for a Full Qtr	% Employed For a Full Qtr	FETPIP Pool	# Training Related (Employed, Education, or Military)	Placement Rate
Pasco	16	15	13	87%	15	15	100%
Brevard	26	26	22	85%	26	24	92%
Daytona	10	10	9	90%	10	10	100%
Edison	29	27	22	81%	27	27	100%
FCCJ	19	19	18	95%	19	17	89%
Gulf Coast	14	14	12	86%	14	14	100%
Indian R.	9	8	6	75%	8	7	88%
Broward	2	2	2	100%	2	2	100%
Palm Beach	37	35	30	86%	35	35	100%
Santa Fe	28	21	16	76%	21	21	100%
St. John's	5	5	5	100%	5	4	80%
St. Petersburg	12	11	9	82%	11	11	100%
Tallahassee	23	21	20	95%	21	19	90%
Valencia	19	17	16	94%	17	16	94%
Hillsborough	19	19	19	100%	19	19	100%
Total	268	250	219	89%	250	241	96%

Source: Florida Education and Training Placement Information Program (FETPIP), Community College Vocational Reports (<http://www.fl DOE.org/fetpip/pdf/0506pdf/cc0506asc.pdf>)





## Program Director's Perspective: Issues, Trends, and Recent Successes

The Radiography Program is currently accredited by the Joint Review Committee on Education in Radiologic Technology (JRCERT). The JRCERT provides stringent guidelines that the program must adhere to in order to maintain compliance with their standards. There is a heavy emphasis on developing critical thinking skills within the program's curriculum and on outcomes based assessments.

The American Society of Radiologic Technologists (ASRT) provides our didactic curriculum. American Registry of Radiologic Technologists (ARRT) determines our clinical requirements and provides the national registry. Since the program's inception in 1981, there have been a total of 6 graduates that have not passed the ARRT on their first attempt.

Changing from rolling to selective admissions has vastly improved our retention. Since the advent of selective admissions in 2007, program retention has continued to increase, achieving a four-year high of 96% with the class of 2008. This has also had a positive impact on the program's productivity and RPI.

We are fortunate to have a very active and diverse Advisory Committee membership. The program enjoys tremendous support from the Radiography community. One of our x-ray labs has been completely replaced and the other two have been refurbished. We have recently purchased a computed radiography (CR) reader.

Graduate and employer surveys are completed six to eight months after graduation. The overall graduate satisfaction reported by the class of 2006 was 98%, and the overall employer satisfaction was 94.7%.

Capital Expenditures for the Radiography program during the past three years totaled \$45,639. Program improvements made as a result of the capital expenditures included a DELL Data Projector with Memory Card, an AmRad X-ray machine, and a DELL computer. The DELL projector was purchased for didactic and lab instruction and is still currently in use today. The antiquated Xonics X-ray Lab was replaced with a modern AmRad X-ray Machine. This upgrade provides an opportunity for our students to work with modern equipment which is similar to what they



will be exposed to within the clinical component of the program. The DELL computer is employed to run program specific simulation software for student use in courses throughout the curriculum.





## Program Action Plan

Program: Radiography

Date Completed: June 6, 2008

	Action Item	Completion Date	Responsible Party
1	To Purchase a C-arm Machine	June 2009	John Fleming
2	To Provide Faculty Training for Digital Imaging Technology	June 2009	John Fleming

### Special Resources Needed:

The funds necessary to purchase a remanufactured C-arm machine are approximately \$30,000. Funds also need to be allocated for faculty members to attend a training seminar on Digital Imaging Technology.





Area(s) of Concern/Improvement:

At our 4/22/08 meeting, the program's Advisory Committee recommended that we purchase a C-Arm Machine in order to ensure that our students acquire some experience with them prior to matriculating into the clinical component of the program.

The American Society of Radiologic Technologists (ASRT) has significantly increased the number of objectives for digital imaging that must be taught within the didactic curriculum. It is imperative that program faculty acquire the expertise to meet this challenge.

  
\_\_\_\_\_  
John Fleming, Program Director

6/23/08  
Date

  
\_\_\_\_\_  
Phil Nicotera, Provost

4/23/08  
Date





## President's Cabinet Review

Summary of observations, recommendations, and decisions:

  
President's Signature

  
Date



Radiography  
2007-08 Comprehensive Academic Program Review  
Department of Institutional Research and Effectiveness

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### References

Rule 6A-14.060(5). *Florida Administrative Code, Accountability Standards*. Retrieved October 2002, from the Division of Community Colleges  
Web site: <http://www.firn.edu/doe/rules/6A-14.htm>

### Contact Information

*Please address any questions or comments regarding this evaluation to:*

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Radiography  
2007-08 Comprehensive Academic Program Review  
Department of Institutional Research and Effectiveness



## Appendix A: Program Overview, 2007

### RADIOGRAPHY (RAD-AS)

#### ASSOCIATE IN SCIENCE DEGREE

(Fully transferable to a Bachelor's Degree at University of Central Florida)

#### Program begins in January

Before entering the first term of the Radiography "program courses" students are encouraged to begin general education courses and must complete the pre-entry requirements. General education and support courses do not have to be completed in the order listed. Candidates will also complete the Health Programs Application form. Please see a course or advisor.

#### PRE-ENTRY REQUIREMENTS (7 credits)

BSC	2085	Human Anatomy & Physiology I	3
BSC	2085L	Human Anatomy & Physiology Laboratory I	1
MAC	1105	* College Algebra	3

#### GENERAL EDUCATION COURSES (15 credits)

ENC	1101	Composition I or (Honors)	3
SPC	1600	Introduction to Speech Communication <b>OR</b> (SPC 1600H, 1016, 1060 or 1060H)	3
		Humanities/Fine Arts Approved Course	3
		Social & Behavioral Sciences Approved Course	3
PHI	1600	Studies in Applied Ethics <b>OR</b> (PHI 1602H, 1631, 2635 or 2649)	3

#### SUPPORT COURSES (7 credits)

BSC	2086	Human Anatomy & Physiology II	3
BSC	2086L	Human Anatomy & Physiology Laboratory II	1
CGS	1100	* Microcomputer Applications	3

#### PROGRAM COURSES

##### 1<sup>ST</sup> TERM IN PROGRAM (10 credits)

RTE	1000	Orientation to Radiography	3
RTE	1418	Principles of Imaging I	2
RTE	1418L	Principles of Imaging I Lab	1
RTE	1503C	Radiographic Procedures I	3
RTE	1503L	Radiographic Procedures I Lab	1

##### 2<sup>ND</sup> TERM IN PROGRAM (6 credits)

RTE	1513C	Radiographic Procedures II	2
RTE	1513L	Radiographic Procedures II Lab	1
RTE	1804L	Radiographic Clinical Education I	3

##### 3<sup>RD</sup> TERM IN PROGRAM (11 credits)

RTE	1458	Principles of Imaging II	3
RTE	1473L	Radiographic Quality Assurance Lab	1
RTE	1814L	Radiographic Clinical Education II	5
RTE	2385	Radiation Biology	2

##### 4<sup>TH</sup> TERM IN PROGRAM (7 credits)

RTE	2613	Radiation Physics	2
RTE	2824L	Radiographic Clinical Education III	5

##### 5<sup>TH</sup> TERM IN PROGRAM (6 credits)

RTE	2782	Radiographic Pathology	2
RTE	2834L	Radiographic Clinical Education IV	4

##### 6<sup>TH</sup> TERM IN PROGRAM (8 credits)

RTE	2563	Advanced Medical Imaging	3
RTE	2844L	Radiographic Clinical Education V	5

**TOTAL PROGRAM HOURS 77**

\* Counts towards General Education Requirements.





## Appendix B: Advisory Board Committee Minutes and Recommendations, 2007-08

### RADIOGRAPHY ADVISORY COMMITTEE MEETING DATE: April 22, 2008 from 2:00 – 3:30 p.m.

Topic	Discussion/Recommendations	Action
<b>Welcome/Introductions</b>	The minutes from the October 4, 2007 Advisory Committee Meeting were discussed.	Introduction completed. Review of minutes tabled.
<b>First Year Class Update</b>	Twenty-three students matriculated into the program this past January.	None needed.
<b>Second Year Class Update</b>	Nineteen of twenty-three students that matriculated into the program in January of 2007 remain for a retention rate of 83%.	The program's retention rate continues to climb and we will continue to closely monitor its progress.
<b>Graduate Update</b>		
<ul style="list-style-type: none"> <li>• ARRT Test Results</li> </ul>	Sixteen of eighteen graduates passed the ARRT on their first attempt for an eighty-nine percent pass rate.	Even though the program's pass rate is above our benchmark of seventy-five percent, the committee recommended the implementation of an online review that must be completed by each student prior to graduation. The cost of this course is \$80 per student and it will be paid for by each individual student.
<ul style="list-style-type: none"> <li>• Employment Results</li> </ul>	All eighteen graduates from this past December were able to find gainful employment within the field.	There is a currently a tighter market in Pinellas County for radiographers. This trend will be closely monitored to ensure proper student enrollment.
<b>ASRT Curriculum</b>		
<ul style="list-style-type: none"> <li>• Computed Tomography</li> </ul>	This curriculum change has been successfully implemented into Advanced Radiography.	None noted.
<ul style="list-style-type: none"> <li>• Digital Radiography</li> </ul>	This requirement is in the process of being added to Imaging I, Imaging II, and Radiation Physics.	None noted.
<b>Palms of Pasadena Hospital</b>	Initial student rotations began at this facility earlier this semester. The clinical coordinator will closely monitor this site in order to ensure that it continues to be a viable option for student clinical rotations.	None noted.



## Appendix B: Advisory Board Committee Minutes and Recommendations, 2007-08 (con't)

Topic	Discussion/Recommendations	Action
<b>Equipment Purchases</b>		
<ul style="list-style-type: none"> <li>Konica CR Reader Monitor Platform</li> </ul>	This platform was purchased in order to allow our CR Reader to be mobile.	None noted.
<ul style="list-style-type: none"> <li>14 x 17" CR Cassette</li> </ul>	This cassette was purchased to be used for experiments during our Imaging Labs.	None noted.
<b>Equipment Recommendations</b>		
<ul style="list-style-type: none"> <li>C-Arm Machine</li> </ul>	The committee recommended that the program purchase a C-Arm Machine in order to ensure that our students acquire some experience with them prior to matriculating into the clinical component of the program. The price of a remanufactured machine is approximately \$30,000 while a new one will cost in the neighborhood of \$130,000.	This request will be reflected in the program's unit plan and an official quote for both a new and remanufactured machine will be acquired.
<b>Graduate &amp; Employer Satisfaction Surveys for the Class of 2006</b>	The scores on the surveys were some of the highest that the program has ever enjoyed.	None noted.
<b>Program Mission Statement &amp; Goals</b>	The mission statement and goals were reviewed.	No changes were recommended.
<b>Labor Market Statistics</b>	The U.S. Department of Labor Workforce Data for Radiologic Technologists was distributed and reviewed.	Even though the data predicts an upward employment trend within the field over the next eight years, there is currently a tight employment market in Pinellas County. This trend will be closely monitored to ensure proper student enrollment.
<b>Fall Advisory Meeting</b>	The college-wide advisory committee meeting will be held on October 17 <sup>th</sup> , 2008 at noon.	None noted.
<b>Advisory Committee Surveys</b>	Hard copies of the surveys were distributed and collected.	For those not in attendance, an online survey is available at the link below:





## Appendix B: Advisory Board Committee Minutes and Recommendations, 2007-08 (con't)

### Advisory Committee Recommendations Spring 2007-2008

**Name of Advisory Board:** Radiography Program

**Date and Time:** April 22, 2008 at 2:00 p.m.

**In Attendance:** John Fleming, Linda Kelsey, Maria Smith, April Bradley, Herb Williams, Amy Brush, Evelyn McCullough, Bev Mullikin, Mary Fratone

**Not in Attendance:** David Nelson, Steve Barber, David Kala, Sandy Seibert, Adam Smith, Mary Ciszak

<u>Recommendation for 2007-08</u>	<u>SPC Response</u>
Sixteen of eighteen graduates passed the ARRT on their first attempt for an eighty-nine percent pass rate. Even though the program's pass rate is above our benchmark of seventy-five percent, the committee recommended the implementation of an online review that must be completed by each student prior to graduation. The cost of this course is \$80 per student and it will be paid for by each individual student.	This online review will be added as a graduation requirement for Advanced Radiography.
The committee recommended that the program purchase a C-Arm Machine in order to ensure that our students acquire some experience with them prior to matriculating into the clinical component of the program. The price of a remanufactured machine is approximately \$30,000 while a new one will cost in the neighborhood of \$130,000.	This request will be reflected in the program's unit plan and an official quote for both a new and remanufactured machine will be acquired.



## Appendix B: Advisory Board Committee Minutes and Recommendations, 2007-08 (con't)

### St. Petersburg College Radiography Program Advisory Committee Meeting Minutes October 4, 2007 12:00 p.m.

#### Present:

John Fleming	Bev Mullikin	Linda Kelsey	Dr. Sandra Wise
Mary Fratone	Mary Ciszak	David Kala	David Nelson
Susan Burnett	Evelyn McCullough		

#### Old Business:

There were no questions or concerns regarding the minutes from the previous Advisory Committee meeting.

#### New Business:

1. Twenty-three first year students matriculated into the program in January of 2007 and nineteen remain for a retention rate of 83%. The retention benchmark for the program is 75%. It is becoming apparent that making the transition from rolling admissions to selective admissions has had a very positive impact on retention.
2. Twenty-three students matriculated into the program in January of 2006 and eighteen remain for a retention rate of 78%.
3. The College is in the process of developing an A.S. to B.S. track for the health care and human services fields. The Interdisciplinary Health and Human Studies B.A.S. Degree has been tentatively scheduled to start in January of 2008.
4. The program is in the process of adding Palms of Pasadena Hospital as a clinical affiliate. Students may begin their rotations through this facility as early as January of 2008. Students will be rotated through the hospital and their outpatient facility.
5. Equipment Update:
  - The purchase of an elevating x-ray table has been approved through the program's 2007/08 Unit Planning process. It has been tentatively scheduled to be installed in December of 2008.
  - Members of the Advisory Committee unanimously recommended that a portable x-ray machine, a c-arm machine, and a computer platform for the CR Reader be added to the program's 2008/09 Unit Plan.
6. JRCERT review panel for initial accreditation will meet later this month at which time they will determine if we have met the standards for accreditation to their satisfaction.
7. The spring Advisory Committee meeting has been tentatively scheduled at the Health Education Center on April 9<sup>th</sup> at 2:00p.m.

The meeting was adjourned at 2:00 p.m.

Radiography  
2007-08 Comprehensive Academic Program Review  
Department of Institutional Research and Effectiveness

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## Appendix C: Advisory Board Committee Minutes and Recommendations, 2006-07

### St. Petersburg College Radiography Program Advisory Committee Meeting Minutes November 15, 2006 2:00 p.m.

#### Present:

John Fleming	Bev Mullikin	Linda Kelsey	Simeon Cumberbatch
Mary Fratone	Jeff Stern	Dwayne Pulis	April Bradley
Maria Echeverria	David Kala	Jen Kniehase	Todd Van Auken
Dr. Sandra Wise			

#### Old Business:

There were no questions or concerns regarding the minutes from the previous Advisory Committee meeting.

#### New Business:

1. Twenty-three first year students matriculated into the program this past January and eighteen remain for a retention rate of 78%. The benchmark for the program is 75%. This class was selected by employing a combination of rolling admissions (first qualified, first admitted) and selective admissions (based on GPA and the number of general education courses completed).
2. Thirteen of the original twenty-two students that matriculated into the program in January of 2005 remain for a retention rate of 59%. This entire class was selected via rolling admissions. These students will be graduating at the end of this semester and all but one of them has secured employment within the field.
3. There will be twenty-four new first year students that will begin the program in January. This class was selected primarily via selective admissions and we are optimistic that our retention rate will continue to improve.
4. JRCERT Update:
  - The program's self-study has been reviewed by staff at the JRCERT.
  - There were a few minor and mostly clerical revisions that were completed.
  - Some of our clinical contracts will need to be revised to ensure compliance with their guidelines. This is being addressed by the college attorney.
5. Equipment Update:
  - As recommended by the advisory committee, the program was able to secure the funds required to purchase a Konica CR Reader. It has been successfully installed and will be incorporated into the Imaging I Lab next semester.
  - The advisory committee approved the recommendation that an elevating x-ray table be added to the program's 2007/08 Unit Plan.
6. A special thanks goes out to David Nelson, Matt Fernandes, and Todd VanAuken for taking time out of their busy schedules to share their expertise in each of their respective fields with our second year students in Advanced Radiography.





## Appendix C: Advisory Board Committee Minutes and Recommendations, 2006-07 (con't)

7. Congratulations go out to Tina Lischak who has taken a full-time faculty position for Pasco-Hernando Community College's Radiography Program. Tina was an adjunct instructor for SPC for the past six years.
8. The program is in negotiations with Palms of Pasadena Hospital to possibly add them as a clinical affiliate sometime next year.
9. The anticipated date of our next meeting will be in April of next year.

The meeting was adjourned at 3:30 p.m.





## Appendix C: Advisory Board Committee Minutes and Recommendations, 2006-07 (con't)

### Advisory Board Recommendations 2006-2007

Name of Advisory Board: Radiography Program

<u>Recommendation for 2006-07</u>	<u>SPC Response</u> (If we didn't act on recommendations, give reason why not.)
Members of the Advisory Committee unanimously recommended that a portable x-ray machine, a c-arm machine, and a computer platform for the CR Reader be added to the program's 2008/09 Unit Plan.	These equipment requests will be added to the program's 2008/09 Unit Plan.





## Appendix D: Advisory Board Committee Minutes and Recommendations, 2005-06

### St. Petersburg College Radiography Program Advisory Committee Meeting Minutes June 21, 2006 2:00 p.m.

#### Present:

John Fleming	Sandy Seibert	Evelyn McCullough	Mary Ciszak
Mary Fratone	Jeff Stern	Dwayne Pulis	April Bradley
Maria Echeverria	David Kala	Tina Lischak	Todd Van Auken

#### Old Business:

There were no questions or concerns regarding the minutes from the previous Advisory Committee meeting.

#### New Business:

1. Twenty-three first year students matriculated into the program this past January and sixteen remain for a retention rate of 70%. The benchmark for the program is 75%. This class was selected by employing a combination of rolling admissions (first qualified, first admitted) and selective admissions (based on GPA and the number of general education courses completed). The ratio for each is as follows:

Total Admissions: 23

- Via Rolling: 12
- Via Selective: 11

Total Drops: 7/23 or 30% Attrition

- Via Rolling: 5/12 or 42%
- Via Selective: 2/11 or 18%

The selective admission process proved to be a better model in regards to program retention. As a note, rolling admissions is no longer an option for students when they apply to the program however, the waiting list will be honored for students that had applied prior to Session I of the 2005/06 academic year.

2. Thirteen of the original twenty-two students that matriculated into the program in January of 2005 remain for a retention rate of 59%.

So far, the ACH rotation has proven to be a successful experience for the second year students. This is the first year that every second year student must complete this two week rotation.

3. The ASRT's 2007 Radiography Curriculum is still under review however, it appears as though they will be requiring each program to include a CT and Cross-Sectional Anatomy component in their curriculum. Fortunately, this process is well under way for our program as these subjects will be taught during Advanced Radiography in the fall. They have also expanded the requirements for digital imaging as expected.





## Appendix D: Advisory Board Committee Minutes and Recommendations, 2005-06 (con't)

### 4. JRCERT Update:

- The self-study has been completed and submitted to the JRCERT for review.
- We are expecting their site visit this fall.

### 5. The Florida Department of Education Radiography Workforce Data was distributed and discussed.

### 6. Equipment Update:

- Our Raytheon Lab was refurbished this semester. An AmRad upright bucky was installed, the table was replaced and a floor mounted tube stand was installed.
- A CR Reader was added to the program's 2006/07 Unit Plan.

### 7. On 6/12/06, we received news that Governor Bush signed bill HB819. We now have Florida law which supports RAs. We would all like to thank Dr. Robert Entel and the Florida Radiological Society for their efforts to get this bill passed.

### 8. The Advisory Committee Handbook and Evaluation Forms were distributed.

### 9. Sandy Seibert announced that Community Hospital, NPR will be replaced with a brand new 236 bed facility called Trinity Medical Centre. It is scheduled to open in two years and the Imaging Department will have full PACS capability.

### 10. The anticipated date of our next meeting will be in November of this year.

The meeting was adjourned at 3:30 p.m.





## Appendix D: Advisory Board Committee Minutes and Recommendations, 2005-06 (con't)

### Advisory Board Recommendations 2005-2006

Name of Advisory Board: Radiography Program

<u>Recommendation for 2005-06</u>	<u>SPC Response</u> (If we didn't act on recommendations, give reason why not.)
The Advisory Committee recommended that the college purchase a CR Reader for the program.	The purchase of a CR Reader has been added to the program's 2006/07 Unit Plan.





Appendix D: Advisory Board Committee Minutes and Recommendations,  
2005-06 (con't)

**St. Petersburg College  
Radiography Program  
Advisory Committee Meeting Minutes  
January 3, 2006 2:00 p.m.**

**Present:**

John Fleming	Martha Charles	Joyce Hopkins	Evelyn McCullough
Meredith Carraux	Jeff Stern	Beverly Mullikin	Melissa Hillebrand
Maria Echeverria	Linda Kelsey	Perry Crowell	Dr. Sandra Pepicello
April Bradley	Todd Van Auken		

**Old Business:**

1. There were no questions or concerns regarding the minutes from the previous Advisory Committee meeting.
2. The program has purchased an AmRad AA2 OTC X-ray System at a cost of approximately \$60,000 to replace the antiquated Xonics machine.

**Action Plan:** The committee recommended that the program consider purchasing a Computed Radiography (CR) Reader. This would provide the means for students to gain experience with the technology that is currently employed in the industry prior to their matriculation into the clinical setting of the program. This request will be added to the program's unit plan.

**New Business:**

1. Fifteen of the original twenty students that matriculated into the program in January of 2004 have completed the program for a retention/graduation rate of 75%. They have all found gainful employment within our service area.

**Action Plan:** None

2. Thirteen of the original twenty-two students that matriculated into the program in January of 2005 remain for a retention rate of 59%. All thirteen students have entered the second year of the program.

**Action Plan:** Develop a means to improve program retention in order to meet JRCERT guidelines.

Beginning this semester, the program has officially made the conversion to the more competitive, selective admissions process. Students are awarded points based on their GPA and the number of general education courses that they have completed. The higher their score, the more likely they will be granted admission into the program. Previously, students were admitted based on the first qualified, first admitted process of rolling admissions. This change should improve the quality of applicants to the program and will likely result in a reduction in attrition.





## Appendix D: Advisory Board Committee Minutes and Recommendations, 2005-06 (con't)

Additionally, the program provided new students with a time management workshop on the first day of class for the first time this semester. Dr. Dolores Teter provided the workshop and the program will investigate the possibility of employing an online format in the future.

3. Twenty-three new first year students have matriculated into the program this semester.

**Action Plan:** None

4. Due to an inability to secure clinical sites, the RA Program proposal has been put on hold until further notice.

**Action Plan:** The efficacy of starting an RA Program will be readdressed in 3 to 5 years.

5. All Children's Hospital has completed the transformation from a minor to a major clinical site. All second year students will be required to complete a two week rotation through their facility. This will provide an opportunity for them to complete the ARRT's pediatric requirements.

**Action Plan:** Closely monitor student progress to ensure the efficacy of this rotation.

6. JRCERT Update;

- Linda Kelsey has been named the clinical coordinator.
- The revised program brochure was distributed and reviewed.
- The required staff training tutorial was successfully implemented. A yearly update will be administered each fall.
- Rotations through Mammography, HSGs and venipuncture have been suspended due to an inability to secure equitable clinical rotations for all students.
- The program mission statement and goals were reviewed and accepted. They will be reviewed on an annual basis.
- The program outcome assessment results were distributed and reviewed.

**Action Plan:** Continue with the process of applying for specialized accreditation.





## Appendix D: Advisory Board Committee Minutes and Recommendations, 2005-06 (con't)

7. Beginning next year, all second year students will complete a mandatory two week rotation through All Children's Hospital (ACH). Peggy Morgan will be the clinical instructor and Cynthia Baldree will be her back-up. The ACH staff is in the process of completing the Clinical Policies and Procedures training and each student will be expected to complete their pediatric competencies during their rotation. The ACH student rotation schedule was distributed.

**Action Plan:** Linda Kelsey will ensure that the staff at ACH is properly trained prior to the first student rotation.

8. The Session II Student Clinical Assignments, the Faculty Clinical Schedule, and the Clinic III Clinical Objectives were distributed and discussed.

**Action Plan:** None

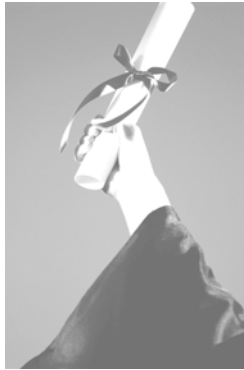
9. Second year students will be excused from clinic from 2/25/06 to 2/28/06 to attend the Atlanta Student/Educator Seminar.

**Action Plan:** John Fleming will collect documentation from each student upon their return to ensure attendance.

10. The anticipated date of our next meeting will be in June of this year.

The meeting was adjourned at 3:30 p.m.





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