

**BOARD OF HIGHER EDUCATION**  
**REQUEST FOR COMMITTEE AND BOARD ACTION**

**COMMITTEE:** Academic Affairs

**NO.:** AAC 12-24

**COMMITTEE DATE:** February 28, 2012

**BOARD DATE:** March 6, 2012

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**APPLICATION OF BAY PATH COLLEGE TO AWARD THE MASTER OF  
SCIENCE IN PHYSICIAN ASSISTANT STUDIES**

**MOVED:** The Board of Higher Education hereby approves the Articles of Amendment of **Bay Path College** to award the **Master of Science in Physician Assistant Studies**

**Authority:** Massachusetts General Laws Chapter 69, Section 30 et seq.

**Contact:** Dr. Shelley Tinkham, Assistant Commissioner for Academic, P-16 Policy and Veterans Policy.

## **INTENT**

Bay Path College, a New England Association of Schools and Colleges-accredited, independent institution located in Longmeadow, Massachusetts, filed articles of amendment to offer a Master of Science in Physician Assistant Studies. The program responds to the changing trends and demands for healthcare professionals who practice medicine under the supervision of physicians and surgeons.

The rationale for initiating a course of physician assistant study at Bay Path College is clear. The U.S. BLS Occupational Outlook Handbook, 2010-2011 Edition indicated a physician assistant (PAS) employment growth rate of 39% from 2008-2018 due to the expansion of the health care industry and cost containment efforts at both the state and federal levels. Nationally students are applying to PA programs in high numbers, fueled by the demand for program graduates in primary care specialties and many high need specialties, such as general surgery and emergency medicine. The Central Application Service for Physician Assistants (CASPA) reports that 30,138 individuals initiated applications to PA programs in the United States, of these 12,216 applicants submitted a total of 71, 587 applications to the 108 participating CASPA PA programs in 2009. Furthermore, Massachusetts created the nation's first comprehensive plan to provide universal health care insurance for its citizens in 2008. As a result there are over 400,000 additional Massachusetts residents with health insurance creating a need for health care providers. Unfortunately, primary care physicians are leaving practice at a high rate, and are not being replaced. In a survey by the Massachusetts Medical Society, not only primary care physicians, but specialists in anesthesiology, cardiology, gastroenterology, general surgery, neurosurgery, orthopedics, radiology, and urology, are in short supply. In the face of increasing rates of obesity, diabetes, hypertension, and an aging population, physician assistants will be needed.

The proposed program will prepare graduates to earn certification and practice as a physician assistant in a health care team environment working with a supervising physician in the specific scope of practice. This scope of practice could be any discipline of medicine which may include family medicine, internal medicine, pediatrics, all medical and surgical subspecialties, women's health including labor and delivery, all aspects of emergent care including emergency medicine and urgent care, occupational medicine, and psychiatry. In collaboration with clinical affiliates, Bay Path College graduates will be poised to secure employment at hospitals, clinics and private practices in the local community.

The faculty of Bay Path College unanimously recommended the addition of the Master of Science in Physician Assistant Studies degree at the October, 2010 faculty meeting, with the Academic Committee of the Board of Trustees subsequently recommending the establishment of the degree at its November 8,

2010 meeting. The Board of Trustees also approved the addition of the Master of Science in Physician Assistant Studies degree by unanimous vote on November 8, 2010.

## **INSTITUTIONAL OVERVIEW**

Bay Path College is a non-profit, NEASC accredited institution for women located in Longmeadow, Massachusetts. The College was founded in Springfield, Massachusetts in 1897 as Bay Path Institute, a coeducational business school. In 1944, the institute was purchased by Thomas G. Carr who renamed it Bay Path Secretarial School and restricted its enrollment to women. During this time, the College moved to its present location in Longmeadow, Massachusetts. The school was chartered by the Commonwealth as Bay Path Junior College in 1949 and was authorized to grant the Associate in Science degree. Authorization to grant the Associate in Arts degree was awarded in 1963. In November of 1988, the Board of Regents approved the two-year institution's request to change the name to Bay Path College: A Two-year College for Women. In 1991, the College was granted authorization to award its first baccalaureate degrees: Bachelor of Arts in Psychology, Bachelor of Science in Legal Studies, Bachelor of Science in Business and Honorary Doctor of Humane Letters. The College was granted authorization to award its first master's program in 2000, the Masters of Science in Communications and Information Management and now offers the Master of Science degree in Nonprofit Management and Philanthropy; Strategic Fundraising and Philanthropy; Higher Education Administration; Special Education; Forensics; Developmental Psychology; and Advanced Practice Occupational Therapy; a Master of Occupational Therapy and a MBA in Entrepreneurial Thinking and Innovative Practices. Enrollment in the graduate professional programs is open to men and women. The College now seeks to offer the Master of Science in Physician Assistant Studies.

## **ACADEMIC AND RELATED MATTERS**

### *Admission Requirements*

The proposed program is an intensive 24 month program. The program will not accept transfer students or advanced placement course work. In order to be considered for admissions into the proposed program, students must have completed the following:

- A baccalaureate degree from an accredited US institution with an overall GPA of 3.0
- Prerequisite courses listed below must be completed with a grade of "C" and a GPA of 3.0
  - 15 semester hours of biological sciences, which must include Human Anatomy and Physiology I & II with lab, and Microbiology

- 15 semester hours of chemical/physical sciences, including Organic or Biological Chemistry
- One college level statistics course
- One college level ethics course
- A minimum of 500 hours of patient contact hours is required. Examples of patient contact hours can include but are not limited to EMT, Paramedic, Lab Tech, Volunteer, and Direct Patient Interaction
- A minimum of 24 hours of documented PA shadowing
- A personal statement of interest and intent
- For international applicants, ESL – TOEFL score of 90 int. – 233 computer – 550 paper

Projected Enrollment

Based on initial market research, the institution plans to recruit 24 full-time students per year who are expected to complete the program in twenty four months.

	<b># of Students Year 1</b>	<b># of Students Year 2</b>	<b># of Students Year 3</b>	<b># of Students Year 4</b>
New Full Time	24	24	24	24
Continuing Full Time	N/A	23	23	23
New Part Time	N/A	N/A	N/A	N/A
Continuing Part Time	N/A	N/A	N/A	N/A
Totals	24	47	47	47

Tuition and Fees

Tuition for the PA program is set at \$13,000 per trimester. During the second year of the program, a clinical rotation fee of \$3,000 per trimester will be assessed to each student. Total cost for the proposed program is \$87,000.

### Curriculum (Attachment A)

Candidates for the Master of Science in Physician Assistant Studies degree will be required to complete a minimum of 116 credits. The program consists of two phases: the didactic phase (62 credits) and clinical clerkship (54 credits). The didactic phase includes clinically oriented basic science education in human anatomy, human physiology, human pathophysiology and clinical pharmacology. Clinical medicine and related courses will provide essential information including internal medicine and related subspecialties, family medicine, general surgery and related subspecialties, women's and men's health, emergency medicine and general pediatrics. These courses will be complemented by education in the behavioral sciences, such as ethics, psychiatry, professional practice, and counseling and risk management. A review of statistical modalities and instruction in conducting evidence based research will be integral to the program, as will diagnostic imaging, clinical laboratory procedures and their interpretation, and procedural skills such as venipuncture, catheterization, suturing, and casting. Coursework will be sequenced to insure that students receive essential basic science instruction prior to receiving related clinical medicine instruction, e.g., covering the cardiac physiology prior to instruction in clinical problems related to cardiology.

The second year of the program will consist of a series of continuous clinical clerkships of 4 to 8 weeks in duration in areas prescribed by the Accreditation Review Commission on Education – Physician Assistant (ARC-PA) such as family medicine, inpatient medicine and out-patient general internal medicine, outpatient pediatrics, general surgery and geriatric/long term care. These rotations will be conducted at clinical affiliate sites of the program and Bay Path College. Elective rotations will be introduced to respond to practice-based and patient care needs identified by clinical affiliates and local physicians.

Each PA student will complete a capstone project under the tutelage of a faculty or community physician mentor. This project will be based on a clinical question of interest developed by the student. The culmination of this project will be an evidence-based paper suitable for publication and a poster presented to the college community.

### **RESOURCES AND BUDGET**

#### Administration and Faculty

The proposed program will be housed within the School of Health Sciences and Human behavior and the director of the program will report to the Dean of this school. The operational structure of the program will include the establishment of the following committees: Admissions Committee, Curriculum Committee, Promotions and Remediation Committee, Clinical Committee and Assessment Committee. Each committee is chaired by a core faculty member, with

membership including core PA faculty and other members of the Bay Path Community stakeholders. Data from each committee will be assessed at the program annual retreat.

A program director, three fulltime faculty, a medical director and a fulltime administrative assistant were hired to develop and implement the program. In hiring, the institution was careful to meet the requirements specified by the accrediting body (ARC-PA) as to both the number of staff and the certification and training required for possible future accreditation.

### Library and Information Technology

Hatch Library, along with its electronic counterpart - the Hatch Virtual Library - serves as the central learning resource center for students at Bay Path College. Library services have expanded to meet the various needs of students in Bay Path's traditional, accelerated (Saturday One-Day-a-Week), and graduate programs. Services include personal reference assistance along with electronic and telephone reference; course-related, class-related, and one-on-one information literacy instruction; and interlibrary loan. A reference librarian is available during all hours when the library is open. Reference and instruction librarians teach information-literacy classes and help with curriculum planning in an information-literacy program that is integrated within the undergraduate core curriculum. At an instructor's request, librarians meet with graduate-level classes to update students on research approaches. A link on the Hatch Virtual Library connects distant and returning students to accessible instructions on using the library's research materials and services. Librarians also work with faculty to highlight library resources most relevant to their courses on the Hatch Virtual Library, with the goal of integrating library resources into the curriculum at all levels of study.

PA resources at Hatch Library come in a variety of formats: reference books; circulating books; DVDs and videos; periodicals in print, microfilm, and electronic format; and research databases. These resources are complemented by titles that support Bay Path's undergraduate and graduate programs in Occupational Therapy (OT), Biology, Forensic Science, and Psychology.

### Financial Resources

The budget for the proposed program is provided in Attachment B.

## PROGRAM EFFECTIVENESS

### Student Learning Outcomes

The program will follow the data gathering and analysis guidelines recommended by the ARC-PA which include monthly data gathering from a wide variety of sources including faculty meetings, faculty self-assessments, student course performance, rotation logs, rotations exams, summative evaluations, clinical site visits and student course and program evaluations. The College identified the following student learning outcomes:

- **Professionalism and Ethics**
  - The graduate shall have the duty to respect the law, to uphold the dignity of the physician assistant profession, and to accept its ethical principles. The physician assistant shall not participate in or conceal any activity that will bring discredit or dishonor to the physician assistant profession and shall expose, without fear or favor, any illegal or unethical conduct in the medical profession.
  
- **Evaluation**
  - The graduate will be able to perform an accurate and comprehensive history and physical examination for patients of any age, in any health care setting, and be able to recognize and interpret pertinent factors in the patient's history and physical findings.
  - The graduate will be able to elicit a screening and problem-based health history consisting of the chief complaint, history of present illness, pertinent review of systems, past medical history, family and social history and alternative therapy practices.
  - The graduate will be able to perform skills necessary to accomplish screening and problem-specific physical examination involving major organs and systems of the human body. The medical information obtained will be organized and presented in a form that lends itself to physician interpretation and will be recorded in the medical record.
  - The graduate will recognize personal prejudices and biases that affect the ability to incorporate cultural beliefs and alternative therapy practices of patient groups into the care planning process.
  - The graduate will be able to develop rapport and trust by using interpersonal skills to facilitate patient sharing of personal information including cultural beliefs, at-risk behaviors, and alternative therapy practices.
  - The graduate will synthesize patient data pertinent to the identification of age-related physiologic changes, health risk factors, medical illness,

behavioral disorders, socioeconomic problems, cultural beliefs about health/illness, and alternative therapy practices.

- **Monitoring**

- The graduate will be able to manage health care activities in the acute care, long term care, home care and outpatient settings by making routine rounds, ordering needed diagnostic tests and therapies, accurately recording progress notes and other documentation, providing services necessary for continuity of care, nursing homes and house calls.
- The graduate will be able to focus on identifying risk factors and characteristics for patient population groups at risk.
- The graduate will define accurately problems of a biological, functional, psychosocial, environmental, and cultural nature and their differential diagnosis; and generate care plans that are relevant to the further evaluation and management of a range of at-risk behaviors, illnesses, and injuries that incorporate the conventional medical therapies, cultural beliefs and alternative therapy practices of individuals.
- The graduate will implement problem management and treatment decisions for individuals seen initially or in follow-up for a previously diagnosed problem that acknowledges cultural beliefs and alternative therapy preferences.
- The graduate will provide continuous care to persons in the home, nursing home, extended care facility, hospital and any other setting considered part of the physician practice.

- **Diagnostics**

- The graduate will be able to initiate requests for routine diagnostic procedures, assist with obtaining quality specimens and/or performing common laboratory and diagnostic procedures, and establish priorities for appropriate diagnostic and laboratory testing.
- The graduate will be able to order and interpret common laboratory procedures such as CBCs, sedimentation rates, serum chemistries, urinalyses, microbiological smears and cultures from various sites, pulmonary function testing, electrocardiograms, and plain film radiographs and other diagnostic studies to further delineate and monitor health risks, illness, or injury with attention to risks and costs.

- **Therapeutics**

- The graduate will be able to perform appropriate pharmacological management and routine therapeutic and/or diagnostic procedures including medication selection, adverse drug reactions, drug level monitoring, routine therapeutic and/or diagnostic procedures including



injections, immunizations, applying and removing casts and splints, debriding and repairing minor lacerations and wound care, managing and caring for simple conditions, assisting surgeons, and assisting in the management of complex illnesses and injuries such as: initiating evaluation and management of acute life-threatening situations from motor vehicle accidents and trauma injuries, cardiac arrest, respiratory failure and other life-threatening situations.

- **Counseling**

- The graduate will be able to provide patient education and counseling services such as: instructing preventive medicine measures and the impact of habits and life styles on health; fostering an awareness of signs, symptoms and precautions for certain diseases common to certain age groups; helping patients and families understand issues of normal growth and development; sensitively working with patients making family planning decisions; helping patients cope with emotional problems of daily living; helping patients and family members cope with the emotional issue of the dying patient; and the ability to discuss implications of certain diagnostic and therapeutic procedures, diseases, and medications.
- The graduate will communicate with and counsel individuals and families about growth and development, family planning, disease prevention through risk factor reduction, diet and nutrition, immunizations, illness and injury evaluation, and therapeutic management plans including alternative therapies and advanced care directives; and assess patient and family member comprehension of a health problem, illness, or injury and the diagnostic and therapeutic care plans for that problem.

- **Referral**

- The graduate will be able to recognize his/her own limitations and the limitations of his/her practice setting, facilitating timely referral of patients to appropriate physicians and others in the interdisciplinary health care team and social service agencies.
- The graduate will report, record, and retrieve findings obtained through interview, examination, and diagnostic testing to the supervising physician and other health care providers in an articulate, efficient, and accurate manner.
- The graduate will be able to communicate with physicians, other members of the health care team, and peers about the evaluation and management of patients based upon illness severity and personal level of confidence.

- The graduate will use critical analysis skills to evaluate whether information in the literature will help to better evaluate, manage, and advise patients about prognosis, laboratory testing, and treatment benefit.

## **EXTERNAL REVIEW AND INSTITUTIONAL RESPONSE**

### External Review

The proposed program was reviewed by Dr. Patrick Auth, Drexel University and Dr. Gloria Stewart, Marietta College. The evaluation included the team's review from December 20, 2011 to January 10, 2012 of the written proposal submitted to the Massachusetts Department of Higher Education (MA-DHE) by Bay Path to offer the *Master of Science in Physician Assistant Studies* degree.

The evaluators stated that the proposed program was consistent with the mission and vision of Bay Path with an appropriate evaluation and assessment process. Faculty, library and information, physical, technological and financial resources were all adequate to support the proposed program. The visiting committee had only one recommendation regarding the addition of pharmacological management to the expected competencies and outcomes listed above.

The program was also reviewed in December 2011 by a visiting team representing the Accreditation Review Commission on Education for the Physician Assistant, Inc (ARC-PA). This review was part of Bay Path's application for provisional accreditation by the Commission. The Commission site visit offers observations regarding the extent to which the institution is in compliance with the *Standards* for accreditation by ARC-PA. In the case of Bay Path College, the ARC-PA site visit team had no observations to offer. Bay Path anticipates provisional accreditation in March of 2012.

### Institutional Response

In response to the visiting committee, the college added a statement addressing pharmacological management learning outcomes in its therapeutics competency definition. The syllabi from Pharmacology and Therapeutics I-IV have also been revised to include instructional objectives that refer to proper prescribing of medications and management of acute and chronic diseases.

## **PUBLIC HEARING**

The required public hearing was held on February 9, 2012 at the Department of Higher Education, located at One Ashburton Place in Boston, Massachusetts. No comment was offered in opposition to the proposed program.

## **STAFF ANALYSIS AND RECOMMENDATION**

After a thorough evaluation of all documentation submitted, staff is satisfied that Bay Path College's proposal to award the **Master of Science in Physician Assistant Studies** degree meets the requirements for NEASC-accredited institutions outlined in 610 CMR 2.08. Recommendation is for approval.

## ATTACHMENT A: CURRICULUM OUTLINE

### Graduate Program Curriculum Outline (Insert additional rows as necessary.)

<b>Major Required (Core) Courses (Total courses required = 116)</b>		
PAS500	Professional Practice in the 21 <sup>st</sup> Century	1
PAS510	Integrated Medical Science	14
PAS520	Evidence Based Medicine	1
PAS522	Public Health Seminar I	1
PAS524	Public Health Seminar II	1
PAS526	Public Health Seminar III	1
PAS528	Public Health Seminar IV	1
PAS530	Pharmacology	2
PAS540	Clinical Medicine I	5
PAS550	Patient Assessment I	2
PAS560	Therapeutics I	2
PAS540L	Clinical Medicine I Lab	1
PAS541	Clinical Medicine II	5
PAS551	Patient Assessment II	2
PAS561	Therapeutics II	2
PAS541L	Clinical Medicine II Lab	1
PAS570	Clinical Medicine III	5
PAS580	Patient Assessment III	2
PAS590	Therapeutics III	2
PAS570L	Clinical Medicine III Lab	1
PAS571	Clinical Medicine IV	5
PAS581	Patient Assessment IV	2
PAS591	Therapeutics IV	2
PAS571L	Clinical Medicine IV Lab	1
PAS600	Introduction to Clinical Practice	4
PAS620	Ambulatory Care Clerkship	8
PAS630	Emergency Medicine Clerkship	4
PAS640	Surgery Clerkship	8
PAS650	Inpatient Medicine Clerkship	8
PAS670	Pediatric Clerkship	4

PAS680	Women's Health Clerkship	4
PAS690	Elective Clerkship	4
PAS694	Elective Clerkship	4
PAS691	Physician Assistant Clinical Seminar 1	2
PAS692	Physician Assistant Clinical Seminar 2	2
PAS693	Physician Assistant Clinical Seminar 3	1
PAS698	Capstone	1
	<b>SubTotal # Core Credits Required</b>	<b>116</b>

<b>Curriculum Summary</b>	
Total number of courses required for the program	37
Total credit hours required for program	116

**Prerequisite, Dissertation or Other Additional Requirements:**

**Admission Requirements:**

- A baccalaureate degree from an accredited US institution with an overall GPA of 3.0
- All prerequisite courses listed below must be completed with a grade of "C" and a GPA of 3.0
- 15 semester hours of biological sciences, which must include Human Anatomy and Physiology I & II with lab, and Microbiology
- 15 semester hours of chemical/ physical sciences, including Organic or Biological Chemistry
- One college level statistics course
- One college level ethics course

**Other Requirements/Prerequisites**

- A minimum of 500 hours of patient contact hours is required. Examples of patient contact hours can include but are not limited to EMT, Paramedic, Lab Tech, Volunteer, Direct Patient Interaction
- A minimum of 24 hours of documented PA shadowing is required
- All prerequisites must be completed within 10 years
- The BPC-PA Program will not allow advanced standing for any professional courses or clinical experiences
- ESL -TOEFL score of 90 int. – 233 computer – 550 paper

		<b>New Academic Program Budget</b>				
		<u>FY2011</u>	<u>FY2012</u>	<u>FY2013</u>	<u>FY2014</u>	<u>FY2015</u>
<b>Assumptions</b>						
	Full-time students	0	0	24	47	47
	Part-time students	0	0	0	0	0
	Tuition per trimester	\$0	\$13,000	\$13,000	\$13,650	\$14,333
	Clinical fee per trimester		\$0	\$3,000	\$3,000	\$3,000
<b>Revenues</b>						
<b>Student revenues</b>						
	Tuition	\$0	\$115,440	\$1,044,934	\$1,608,927	\$2,012,369
	Clinical Fee	\$0	\$0	\$0	\$207,000	\$207,000
	<b>Total Revenues</b>		\$115,440	\$1,044,934	\$1,815,927	\$2,219,369
<b>Expenses</b>						
<b>Compensation and benefits</b>						
	Program Director	\$ 62,500	\$ 131,950	\$ 135,909	\$ 139,986	\$ 144,185
	Clinical Coordinator (faculty)	\$ 42,500	\$ 88,813	\$ 91,477	\$ 94,222	\$ 97,048
	Academic Coordinator (faculty)	\$ -	\$ 91,350	\$ 94,091	\$ 96,913	\$ 99,821
	Medical Director (part-time)	\$ 12,500	\$ 50,000	\$ 51,500	\$ 53,045	\$ 54,636
	Faculty Member (1 full-time)	\$ -	\$ 100,750	\$ 103,773	\$ 106,886	\$ 110,092
	Administrative Assistant	\$ -	\$ 38,285	\$ 39,434	\$ 40,617	\$ 41,835
	Adjunct Faculty Wages	\$ -	\$ 20,000	\$ 40,000	\$ 80,000	\$ 80,000
	Overloads	\$ -	\$ -	\$ -		
	Benefits	\$ 29,375	\$ 127,287	\$ 131,846	\$ 138,517	\$ 142,504
	<b>Sub-total comp &amp; benefits</b>	\$ 146,875	\$ 648,435	\$ 688,028	\$ 750,185	\$ 770,122
<b>Other Expenses</b>						
	Office Supplies	\$ 2,000	\$ 10,000	\$ 10,300	\$ 10,609	\$ 10,927
	Other Supplies	\$ 2,000	\$ 5,000	\$ 5,150	\$ 5,305	\$ 5,464
	Bookstore	\$ 500	\$ 1,000	\$ 1,030	\$ 1,061	\$ 1,093
	Postage	\$ 2,000	\$ 2,000	\$ 2,060	\$ 2,122	\$ 2,185
	Printing and duplicating	\$ -	\$ 2,500	\$ 5,000	\$ 5,150	\$ 5,305
<b>Purchased Services</b>						
	Library Periodicals	\$ -	\$ 12,000	\$ 25,000	\$ 12,000	\$ 12,000
	Marketing	\$ -	\$ 100,000	\$ 75,000	\$ 50,000	\$ 50,000
	Laboratory Rental	\$ -	\$ -	\$ 75,000	\$ 75,000	\$ 75,000
	Clinical Site Fee				\$ 207,000	\$ 207,000
	Honoraria	\$ -	\$ -	\$ 2,000	\$ 2,060	\$ 2,122
	Memberships	\$ 3,500	\$ 10,000	\$ 10,000	\$ 10,300	\$ 10,609
	Student Entertainment	\$ -	\$ -	\$ 1,500	\$ 1,545	\$ 1,591
	Accreditation Costs		\$ 8,000	\$ 2,000	\$ 2,060	\$ 2,122
	Meetings	\$ 4,000	\$ 15,000	\$ 15,000	\$ 15,450	\$ 15,914
	Travel	\$ 2,000	\$ 5,000	\$ 10,000	\$ 10,300	\$ 10,609
	<b>Total Expenses</b>	\$ 162,875	\$ 818,935	\$ 927,068	\$ 1,160,146	\$ 1,182,062
	<b>Surplus (Deficit)</b>	\$ (162,875)	\$ (\$703,495)	\$ 117,865	\$ 655,781	\$ 1,037,307
<b>Capital Expenses</b>						
	PA Lab Renovations	\$ 50,000	\$ 100,000	\$ -	\$ -	\$ -
	Lab Equipment	\$ -	\$ 150,000	\$ -	\$ -	\$ -
	<b>Total Capital Expenses</b>	\$ 50,000	\$ 250,000	\$ -	\$ -	\$ -
	<b>Net Cash Flow</b>	\$ (212,875)	\$ (953,495)	\$ 117,865	\$ 655,781	\$ 1,037,307
revised 9/12/11 MJG						