

Carroll University

Regional Accreditation

Accredited by The Higher Learning Commission and a member of the North Central Association. The commission's address, phone number and website are as follows:

230 S. La Salle St., Suite 7-500, Chicago, Illinois, 60604-1413
800.621.7440/312.263.0456
www.ncahlc.org



Notice of Non-Discrimination policy

Carroll University does not discriminate in any manner contrary to law or justice on the basis of race, color, sex, age, religion, sexual orientation, national origin, disability or veteran's status in administration of its educational, admission, financial aid, athletic or other university policies and programs nor in the employment of its faculty and staff.

Carroll University Address and Phone Numbers

Carroll University, 100 N. East Ave., Waukesha, Wisconsin 53186

For general information, call 262.547.1211
To contact the admission office, call 262.524.7220 locally
or toll-free at 1.800.CARROLL (1.800.227.7655)
FAX: 262.524.7139
www.carrollu.edu

NOTE TO STUDENTS

This catalog provides general information about Carroll University graduate programs, and it summarizes important information about the University's policies, requirements for graduation, regulations and procedures. It is not intended to establish, nor does it establish, a contractual relationship with students. Rather, the catalog is published to acquaint students with information that will be helpful to them during their graduate careers.

It is necessary in the general administration of the University to establish requirements and regulations governing the granting of degrees. Academic advisers, other faculty, and academic staff members are available to aid students in understanding the requirements and regulations. It is the student's responsibility, however, to meet them. Students are encouraged to keep this catalog as a reference, should questions arise.

Changes in curricular requirements may occur between catalog publications. Students will be informed of such changes. When this occurs, per individual graduate program policy, students may follow the requirements in effect at the time they entered or they may follow the changed requirements. Students must choose to follow one catalog or the other; they may not pick and choose from the various requirements outlined in two or more catalogs. Students must follow the curriculum requirements of any one catalog in effect during their enrollment. Programs with additional accreditation standards may result in different course requirements from the student's original catalog. Progression standards are subject to change based on regulatory, licensing, and/or certification needs. Students returning to the University after an absence of one academic year or more must meet the degree requirements of the catalog in effect upon their return or of a subsequent catalog. Reasonable substitutions will be made for discontinued and changed courses by the program director with approval of the college dean.

The University reserves the right to make other necessary changes without further notice.

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INTRODUCTION

Wisconsin's Oldest College

In 1841, settlers living in the Wisconsin Territory community of Prairieville established the academy that five years later would become Carroll College. Soon after its founding, Carroll affiliated with the Presbyterian Church and adopted the motto, "Christo et Litteris," which means "for Christ and Learning." The University's early patrons believed that higher education would serve as an instrument for civilizing the wilderness, spreading the Gospel and planting the roots of democracy deep in the prairie soil. They also sought to provide for the prosperity of their children and future generations. As Wisconsin's oldest institution of higher learning, Carroll is known today as the "Pioneer College." Carroll became Carroll University in 2008.

Throughout its history, the hallmarks of the Carroll educational experience have been teaching excellence and individualized attention. These values find expression in four important documents: the Mission Statement, the Four Pillars, the Statement of Educational Goals and the Carroll Compact.

Carroll University Mission Statement

"We will provide a superior educational opportunity to our students, one grounded in the liberal arts tradition and focused on career preparation and lifelong learning.

We will demonstrate Christian values by our example.

We shall succeed in our mission when our graduates are prepared for careers of their choice and lives of fulfillment, service and accomplishment."

The Four Pillars

Today, the institution draws upon its rich liberal arts tradition to prepare students to achieve their full potential in our ever-changing society. The University's educational philosophy is sustained by the four pillars of integrated knowledge, lifelong skills, gateway experiences and enduring values.

Integrated Knowledge is the very foundation of a quality liberal arts program. The Carroll curriculum emphasizes breadth and depth of learning. Our purpose is to encourage students to recognize the interrelationships among ideas. We believe that students with this understanding will continue to learn, grow and succeed long after they leave the campus.

Lifelong Skills help students prepare for life and work in a world of rapid and constant change. We believe that graduates will continue to evolve and contribute to their communities long after they earn their degrees. To that end, our mission is to help students learn to think critically and creatively, adapt to changing technologies, work efficiently and effectively, collaborate with others, and communicate clear, compelling ideas.

Enduring Values help students to consider always the impact of their actions on the world around them. We believe that effective leaders draw their inspiration from strong personal value systems. Our goal, therefore, is to offer students multiple opportunities to make decisions and then to reflect upon their consequences.

Gateway Experiences occur both upon entering and upon leaving Carroll University. We believe that our educational responsibility extends beyond the classroom into every aspect of our students' lives. That is why we place a special emphasis on preparing incoming students for university life and on helping graduates make successful transitions into their first jobs, or graduate and professional schools.

The four pillars undergird all that we do at Carroll University. They are integral to our undergraduate curriculum and guide our post-baccalaureate and graduate programs. In other words, they provide the broad inspiration for the Carroll experience and the many relationships we nurture with other organizations and institutions.

Graduate Student Learning Goals/Assessment

1. Students will demonstrate advanced knowledge, skills, dispositions, and values appropriate to the discipline.
 - To be awarded an advanced degree, all graduate students will be required to complete a program of coursework appropriate to the discipline. The culminating experience activity, including a thesis, project, or comprehensive examination is required.
2. Students will demonstrate the ability to be creative, analytical, and critical thinkers.
 - Graduate level seminars and courses will require extensive research and writing activities that meet high academic standards in both form and content.
 - The completion of an original thesis or project may be required as part of graduate academic programs.
3. Students will demonstrate the ability to work as individual researchers/scholars as well as in collaboration with others in contributing to the scholarship of their disciplines, as appropriate.
 - Graduate courses, seminars, and internships may require that students demonstrate their ability to work successfully on group projects.
4. Students will demonstrate relevant knowledge and dispositions enabling work with diverse populations as appropriate to their individual discipline.
 - Student assignments may require demonstrated awareness of intercultural and global perspectives.
 - Student portfolios may be required that reflect, in either an applied or a research-oriented context, an understanding of the global perspectives of the discipline.
 - Students may be required to document proficiency or experience in second language/culture studies.
5. Students will demonstrate knowledge of new and various methods and technologies as appropriate to the discipline.
 - Students may be required to participate in a supervised practicum, internship, or service learning activity in which they demonstrate the ability to perform successfully.

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- Students may be required to participate in Distance Learning courses in which they demonstrate learning through mediated instruction.
 - Students may be required to demonstrate their ability to use multimedia in the classroom or in professional presentations.
 - Students may be required to demonstrate their ability to use all relevant information technology that is useful in their fields.
6. Students will be required to demonstrate advanced oral and written communication skills, complemented, as appropriate to the discipline, by the ability to access and analyze information from a myriad of primary, print, and technological sources.
- Entering students may be required to submit scores from an examination such as the GRE or a similar nationally-normed assessment instrument; a minimum score may be established by individual programs.
 - Students are required to meet standards in writing competency as determined by each program.
 - Students may be required to make oral presentations in graduate courses.
 - Students are required to complete a comprehensive examination, thesis or project that demonstrates their knowledge of the discipline and their ability to communicate this knowledge articulately in both oral and written modes.
 - An original written thesis or project may be required that reflects the students' ability to conduct research using primary sources from a broad spectrum of printed and electronic media. An oral defense or presentation of the thesis or project is required.
 - When required to write a thesis or project, students will submit timely proposals to their committees. All research conducted by students must comply with relevant federal, state, and University policies. Students are required to complete theses or projects that are persuasive, cogent, and well-articulated.
7. Students will demonstrate ethical standards of behavior, both personally and professional.
- Students are expected to be aware of and adhere to the ethical standards appropriate to their respective fields and demonstrate personal behavior consonant with those tenets.

The Carroll University Compact

Carroll University is a community for learning. As individuals, we come to the campus from different homes and cultures. We bring with us our distinctive perspectives, traditions and experiences. Here we become participants in a community dedicated to the pursuit of academic excellence, personal fulfillment and spiritual meaning. Choosing to join such a community obligates each member to consider thoughtfully the values espoused by the larger group. We therefore invite you to contemplate these ideals and strive toward their realization. We ask that you enter into a voluntary compact with the other members of the community that is Carroll University to live and work according to these values.

I will value the human diversity and dignity of all people and will respect their ideas, opinions and traditions. This ideal requires openness of mind, a willingness to affirm the differences that exist among us, and a desire to develop shared understanding.

Dedication to this ideal is inconsistent with behaviors that compromise or demean individuals and groups.

I will practice personal academic integrity. This ideal requires a commitment to honesty, a regard for the rights and feelings of others, and the courage to speak one's convictions. It obligates each member of the community to support creation of a positive learning and living environment and is inconsistent with cheating in classes, games or sports; lying, excuse making or plagiarizing; and infidelity, coercion or disloyalty in personal relationships.

I will care for the physical environment of the campus and its neighborhood setting. This ideal requires stewardship of the resources allocated to us and a commitment to upholding the natural ecology of the campus and the larger community of Waukesha. Devotion to this ideal is inconsistent with all forms of theft, vandalism and misappropriation; wastefulness or destruction; and violation of the rights of others to live, learn and work in a clean and healthy environment.

I will support and enhance the development of others. This ideal requires a commitment to creation of an empowering learning and working environment, where collaboration, trust and cooperation are favored over suspicion and excessive competition. Dedication to this ideal is inconsistent with blaming or inhibiting the growth of others.

I will encourage creativity, artistic expression and excellence in all areas of our lives. This ideal requires the understanding that beauty and boldness are inherent to the human spirit. A commitment to this ideal is inconsistent with devaluing the work, performance or expressions of another person.

I will seek to understand my purpose in the world. This ideal requires the development of a global vision, an understanding that one is a citizen of the international community. Dedication to this idea is inconsistent with parochialism, bigotry and selfish use or allocation of shared resources.

I will dedicate myself to exploration of personal values and the spiritual quest for meaning. This ideal requires the willingness to explore one's inner life through reflection, study and inquiry.

ACADEMIC POLICIES

ATTENDANCE

The University expects students to be prompt and regular in attendance at all scheduled classes. Records of attendance are maintained by each individual professor, and official notification is given to any student with excessive absences. Attendance at clinical and field experiences, if appropriate, is mandatory for all students.

CREDITS

The unit of credit is the semester hour. It is defined as one 50-minute class period per week (or its equivalent) for one semester. Thus a lecture-discussion course that meets three 50-minute periods a week ordinarily carries three semester credits. See individual program for laboratory credit equivalencies.

GRADING SYSTEM

A system of letter grades is used in courses for which degree credit may be earned. A 4.00 grade point system is used under which a student earns grade points for each credit completed.*

Letter	Grade points	Description
A	4.00	Excellent
AB	3.50	Intermediate grade
B	3.00	Good
BC	2.50	
C	2.00	
D	1.00	
F	0.00	Failure
AU		Audit
I		Incomplete (see definition on page 9.)
NR		Grade not received
IP		In progress
S		Satisfactory (A, A/B, B level)
U		Unsatisfactory (D or F level)
W		Withdrawal

*This is the general grading system of the graduate programs. Grading policy may vary for specific programs.

GRADE POINT CALCULATION

The grade point values when multiplied by the number of course credits give the total number of grade points earned for that particular course. In a three-credit course, for example, a grade of B yields 9 grade points; a grade of A yields 12 grade points. The grade point average is the ratio between total academic grade points and total academic hours: that is, the quotient obtained by dividing the total number of academic grade points earned by the total number of academic hours attempted. For example, a pro-

gram of 12 academic credits in which 36 grade points are earned will yield a grade point average of 3.00 or an average of B (36 divided by 12 = 3.00).

INCOMPLETE GRADING

A report of incomplete means that the student has been unable to complete the required work for a valid reason; it is not given for neglected work. In order to receive an incomplete, the student must initiate the request by submitting a properly completed form (available online at www.carrollu.edu/academics/registrar/ and at the Registrar's Office) to the instructor prior to the end of the term. If the instructor agrees with the request, the completed form is signed by the student, the instructor and the director of the graduate program and is then submitted by the instructor to the Registrar. Upon receiving the form with all relevant information and appropriate signatures, the Registrar will post the incomplete grade to the student's transcript. An incomplete must be removed by the end of the next semester or it automatically becomes a failure. An extension may be granted only with written consent from the student, the instructor and the director of the graduate program.

MEDICAL OR PERSONAL LEAVE

If a student must be absent from the program for an extended period of time for medical or personal reasons or jury duty, written notice must be given to the director of the specific graduate program. Written notice must also be given to the director of the specific graduate program prior to the student's return to the program. If applicable, the student may be asked to verify that he or she has complied with any technical standards previously imposed and with conditions for the leave. In addition, remediation or course repetition may be required of the student dependent on the length of the absence or curriculum revisions approved during the leave. Any course, laboratory, outside learning experience or full-time clinical make-up or remediation is dependent upon academic scheduling and professional faculty and facility availability.

ACADEMIC HONESTY

Cheating on examinations, plagiarism, improper acknowledgment of proper sources in written material, and inaccurate claims of work done are serious offenses in an academic setting. These forms of unethical behavior will be subject to severe disciplinary action.

The Carroll University Policies and Procedures on Student Academic Integrity can be found in the Student Handbook (available online at www.carrollu.edu/studentlife/).

ADDING OR DROPPING COURSES

A student may add a course only during the first week of the fall or spring semesters. For summer sessions and other specially timed courses, refer to the published timetables for deadline dates to add courses. A student may drop a registered course through the eighth complete week of the fall or spring semesters. For summer sessions and other specially timed courses, refer to the published timetables for deadline dates to drop courses. (Drop policy may vary for specific programs.) The course will appear on the transcript as attempted credits; however, the grade will be a W (withdrawal) and

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will not affect the grade point average. Courses improperly dropped will be designated by the grade of F.

INDEPENDENT STUDY

Independent study may be offered by individual graduate programs. See specific program for detailed guidelines regarding independent study. Independent study courses must be approved by the instructor, program director and college dean.

INTERNSHIPS OR WORK-ORIENTED EXPERIENCES

Internships and field experiences are under the direct supervision or coordination of a member of the Carroll University faculty. Such courses are taken for academic credit with the appropriate grading (letter grades or S/U) from an assigned instructor. Each individual program will determine whether an internship or work-oriented experience will be offered. These courses are subject to the general regulations that govern any course offered, including registration within the time period allowed for an on-campus course. A student must consult with the program director or an appropriate faculty member to arrange for an internship or field experience.

TRANSCRIPTS

The Registrar's Office supplies official transcripts of records of those students who make a written request and who have no outstanding obligations to the university. Transcripts cannot be released without the express written consent of the student. This is in accordance with the Family Educational Rights and Privacy Act of 1974. Transcript requests should be mailed to Registrar's Office, Carroll University, 100 N. East Ave., Waukesha, WI 53186.

POLICY ON STUDENT RECORDS

Several information sources are maintained concerning each student at Carroll University: the admission file, the permanent academic record, the student personnel file, the placement file, the alumni file, the publicity file and the financial aid file for students applying for aid. A student may review the applicable files, except for material provided in confidence, with a professional staff member under the provisions of the Family Educational Rights and Privacy Act of 1974 (FERPA) as amended.

FERPA¹ gives certain rights to parents regarding their children's educational records. These rights transfer to the student who has reached the age of 18 or is attending school beyond the high school level. Generally the school must have the student's written permission to release any educational information to anyone, including the student's parents. The law does allow for the following exceptions: school employees who have a need to know; other schools to which a student is transferring; certain government officials to carry out lawful functions; accrediting organizations; persons who need to know in cases of health and safety concerns.

¹ Furnished by the United States Department of Education, fact sheet.

Schools may disclose "directory information" or information published in the student directory unless the student signs a Right to Privacy form available at the registrar's office. Carroll University has adopted a policy that will only allow the disclosure of directory information if the party asking for the information can identify himself/herself in writing (this Carroll University policy is within FERPA regulations, which allow individual institutions to determine their own policies concerning directory information).

FERPA also grants the student the right to review those records, files, etc., that are maintained by the university. The student must make an appointment with the university registrar to do so. Students may challenge any information they believe to be inaccurate. If the university official does not agree to modify the information, the student may file a written appeal and has a right to a hearing.

FERPA also states that all institutions must disclose graduation rates to current and prospective students. These rates are available in the office of admission and online at <http://nces.ed.gov/collegenavigator/>.

ACADEMIC STANDING

Physical Therapy students, please see page 62 for the Academic Progression policy within the Physical Therapy Program.

Physican Assistant students please see page 43 for the Academic Progression policy within the Physican Assistant Program.

All Master of Business Administration, Master of Education and Master of Software Engineering students are subject to the following policy regarding academic standing.

GOOD STANDING

All students are expected to maintain at least a B (3.00) grade point average in all graduate course work. Any student who earns a grade of C or lower or who does not maintain at least a 3.0 semester or cumulative grade point average in graduate course work is subject to academic action following a review by the Academic Steering Committee (ASC).

PROBATION

All graduate students with any number of attempted credits are eligible for probation. As soon as a student's graduate semester or cumulative grade point average drops below a 3.0, that student is placed on academic probation.

Students not currently on probation will be placed on academic probation if a grade of C is earned in any graduate course and/or if the earned GPA is between 2.5 and 3.0. In the Master of Education Program, courses in which grades of C or lower are earned do not count toward certification, licensure, or degree completion.

Students currently on probation must earn a better than B average in the subsequent semesters after being placed on probation. Students will be continued on probation

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with a better than B average when the student's semester GPA is greater than a 3.0 but their cumulative GPA is not yet a 3.0. NOTE: Students may be continued on probation for one semester only.

SUSPENSION

All graduate students with 6 or more attempted credits are eligible for suspension.

Students not currently on probation who achieve a GPA below a 2.5, have earned a C or lower grade in a previous semester or have earned a grade of D and/or F in any graduate course will be suspended for one semester and the adjacent summer.

Students currently on probation who fail to meet the terms of their probation will be suspended for one semester and the adjacent summer.

DISMISSAL

All graduate students with a minimum of 9 attempted credits are eligible for dismissal.

Students not currently on probation who have earned all D's and/or F's with 9 attempted credits or students who have previously been suspended and have earned below a B average in the semester or have a cumulative GPA below 3.0 will be dismissed from the program.

Students currently on probation who were previously suspended will be dismissed if probation conditions are not met.

Students may appeal any probation, suspension or dismissal to the Academic Steering Committee (ASC).

GRADUATION

An Application for Graduation form must be filed with the Registrar's Office one year before the expected date of graduation. Forms are available at the Registrar's Office or online at <http://www.carrollu.edu/academics/registrar>. After the application is filed, a degree audit is sent to the student indicating remaining requirements to be completed.

AWARDING OF DEGREES

Degrees are awarded three times a year (May, August and December) to graduates who have completed all degree requirements. The formal conferring of degrees for the year occurs at the Commencement ceremony in May. To participate in the Commencement ceremony all graduate students must have completed all degree requirements.

GRADUATE STUDIES AT CARROLL

Carroll University offers increasingly varied opportunities to earn graduate degrees. Currently, the University offers the Master of Business Administration, the Master of Physican Assistant Studies, the Master of Education, the entry-level Doctor of Physical Therapy, and the Master of Software Engineering. Three emphases are available within the Master of Education degree: curriculum and instruction, adult and continuing education, and health education.

Graduate education focuses on intellectual challenge and the development of critical thinking skills. Working professionals are encouraged to reflect on their current and future practice. Recognizing the compelling need for continuing education today, Carroll's graduate programs are designed to stay abreast of the latest knowledge in each field of study.

BENEFITS OF GRADUATE WORK AT CARROLL

Carroll's graduate programs are well suited to the needs of working professionals. While the entry-level Master of Physical Therapy, Doctor of Physical Therapy program and the Master of Physican Assistant Studies require full-time attendance, the Business Administration, Graduate Education and Software Engineering programs are intended to be completed on a part-time basis. Entire degrees are available through evening attendance. Graduate students in these programs may enroll on a year-round basis, while studying at their own pace. Individualized advising is available through faculty advisers supplemented by counselors in the Office of Part-time Studies and the Office of Admission.

Graduate students are encouraged to apply learning to their current positions. They benefit from the opportunity to network with others in their field as they develop professional expertise. Classes are highly interactive as students and faculty share ideas, questions and viewpoints. Educational relevance is a primary commitment within each graduate curriculum.

MASTER OF BUSINESS ADMINISTRATION

Matthias Bollmus	Instructor
Dennis M. Debrecht	Associate Professor and Director of MBA
Catherine Jorgens	Instructor
Gregory A. Kuhlemeyer	Associate Professor
Jeffrey T. Kunz	Assistant Professor
Michael G. Levas	Associate Professor
Gary L. Olsen	Associate Professor
Richard J. Penlesky	Professor
Gregory J. Schultz	Assistant Professor
Frances Tuer	Assistant Professor
Mary Ann Wisniewski	Professor

PROGRAM OVERVIEW

The Master of Business Administration degree includes coursework in accounting, business ethics, business law, business policy and strategy, economics, finance, leadership, marketing, operations and supply chain management, and quantitative analysis. The general focus provides students with a broader and deeper understanding of the business world.

Learning Outcomes

Upon completion of the MBA program, students will be able to:

1. better understand business concepts and their applications;
2. demonstrate mastery of business communication skills;
3. effectively apply appropriate tools and techniques to solve complex business problems;
4. formulate and evaluate effective business policies and strategies within a global environment;
5. collaborate effectively in a competitive environment; and
6. examine and analyze issues related to diversity and ethics in a multicultural environment and their impact on the organization.

General Degree Requirements

The MBA is an 11-course, 33-credit program. Students must maintain a minimum GPA of 3.0.

ADMISSION

Applicants may complete up to 9 credits as a non-degree graduate student prior to being formally admitted to the graduate program.

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Applicants begin the admission process by completing a Carroll University Graduate Studies Application. Applications and official transcripts of all previous post-secondary coursework are submitted to the Carroll University Admissions Office.

Applicants must have an earned undergraduate degree from an accredited institution AND successful completion of all foundation coursework (see below)* AND:

1. GPA of 2.75 or higher (on a 4.0 scale) OR
2. GMAT score (or GRE equivalent score) of 540 or higher OR
3. [GMAT score (or GRE equivalent score) + 200 * GPA] > 1,000

Foundation Coursework*

ACC 205, Financial Accounting

BUS 301, Principles of Marketing

BUS 302, Principles of Management

BUS 304, Principles of Finance

BUS 305, Principles of Operations Management

CSC 107, Problem Solving Using Information Technology (Excel 2007)

ECO 124, Principles of Microeconomics or ECO 225, Principles of Macroeconomics

MAT 112, Introduction to Statistics

*These Carroll University courses are not specifically required, but represent the general knowledge base that students need. The Director will determine whether courses from other institutions fairly represent the knowledge base necessary to be successful in the program.

Academic Planning

Initially, interested students meet with an advisor to discuss how their background and educational goals relate to the MBA. Part-time students enroll in 6-8 credits per semester while full-time students enroll in 9 credits per semester (at least 6 credits are needed to qualify for financial aid.)

Requirements for the MBA degree must be completed within seven years of starting the program. Students who interrupt their studies for one full academic year must reapply and must follow any new requirements upon re-entering.

TUITION

Tuition for graduate courses in the MBA is \$535 per credit.

FINANCIAL ASSISTANCE

Financial aid, in the form of student loans, is available to MBA students who are enrolled at least half-time (6 credits per semester). For further information, call the Office of Financial Aid at 262.524.7296.

TRANSFER CREDITS

With approval of the director of the MBA, up to nine semester hours of graduate, business-related coursework, taken within the past seven years, may be transferred from

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other accredited colleges or universities. Transfer courses are evaluated by the MBA Director on an individual basis.

WITHDRAWAL PROCEDURES

Any graduate student who wishes to withdraw should first meet with the Director of the MBA who will conduct a brief interview with the student. Students must also meet with the Director of Student Success, whose office is located in the Financial Aid office on the first floor of Voorhees Hall.

Students who add or drop a course must do so in writing through the Registrar's Office. Refunds are based on the date of the postmark of withdrawals sent by mail or on the date of delivery of those brought in personally to the Registrar's Office. Students registered for a class that is cancelled by the University due to lack of enrollment are given a full refund.

SUPPORT SERVICES

The Admission Office provides a point of initial contact and a face for Carroll. Admission support services are handled using a team approach. The Director of the MBA is involved in the admission acceptance process and in helping students enroll in appropriate courses.

The International Office plays a role for students who seek to come to the United States to advance their academic careers with a graduate degree from Carroll.

The Registrar's Office handles enrollment and transcript aspects of courses.

Financial aid is available to graduate students who are enrolled at least on a half-time basis, are degree seeking, and meet all other guidelines established by the University and the U.S. Department of Education. For financial aid purposes, half-time status is a minimum of six credit hours per semester and full-time status is a minimum of nine credit hours per semester. Unless a scholarship or grant is received from an outside organization, graduate students are eligible to receive financial assistance only in the form of loans. Financial aid counseling is provided by the Carroll University Office of Financial Aid.

Information Technology Services (ITS) provides support for computing and information-related activities.

COURSE DESCRIPTIONS

BUS 600. Managerial Economics

3 credits

This course provides the theory and tools necessary for the analysis and solution of problems that have significant economic consequences for the business firm. Economic theory is applied in a way that would enable the decision-maker to understand the effect of the economic environment on resource allocation within the organization. This is an applied, problem solving course.

BUS 605. Marketing Management

3 credits

This course provides students with the opportunity to learn about marketing and management concepts. Marketing is a ubiquitous part of our lives and its influence on our lives is increasing. Marketing techniques have been used in the profit sector for decades. Not-for-profit organizations have adopted marketing techniques out of necessity in the last two decades. At the end of the course students will be able to: Identify basic marketing concepts, terminology and practices, approach marketing from a system's point of view, analyze marketing problems using the case analysis method, and present findings and recommendations in oral and written forms.

BUS 610. Quantitative Decision Making

3 credits

This course develops knowledge and abilities useful for making effective business decisions. It presents tools and procedures that can be used to effectively analyze, interpret and communicate information. The course encourages students to think analytically and to reason logically using available information and appropriate technology in order to solve problems and make decisions. Course topics include decision making under uncertainty, time series forecasting, linear programming and the transportation method.

BUS 615. Current Topics in Business Law

3 credits

This course expands on foundational concepts and legal principles that are applicable to the American legal system, its development, and inherent ethical considerations. Course topics include the basis and structure of business contracts; the creation and characteristics of agencies, partnerships, limited liability companies, and corporations; and the rights and liabilities of agents, partners, directors, and shareholders; personal property, sales and the UCC, international transactions, product liability, secured transactions, insurance, negotiable instruments, banking, and bankruptcy.

BUS 620. Advanced Managerial Accounting

3 credits

This course integrates fundamental managerial accounting topics with strategic analysis to demonstrate how accounting information is used to make business decisions, design control systems, and evaluate the impact on various stakeholder groups. This class addresses issues of measurement and causality. Accounting is a measurement process and, for measures to be meaningful, it is necessary to know what to measure, how to measure, and what the consequences of the measure will be. During the class, there is a balance between accounting computations and use of the resulting information to make decisions. The course explores how different accounting systems affect how decisions are made within an organization. The focus is on information used for internal decision making purposes. The course is designed for the MBA who will be using, rather than producing, financial information.

BUS 625. Leading and Managing in a Changing Environment

3 credits

This course examines multiple theories, approaches, and research-based understandings of the theoretical constructs of leadership and management. Emphasis is placed on the evolution of leadership and management theories. Enduring elements, ongoing issues, emerging trends, and contemporary research are examined.

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BUS 630. Business and Ethical Decision Making **3 credits**

This course examines the nature and scope of business and organizational integrity. It emphasizes the perceived conflict between the traditional corporate objective of profit maximization and the overall desire for increased social welfare. This course encourages comparative analysis of business ethics within the moral standard of the world community. It addresses how to embed ethics into the everyday business decision-making and practice of organizations.

BUS 635. Operations and Supply Chain Management **3 credits**

This course integrates the principles, theories and techniques learned from prior operations management courses and provides a broad perspective for efficiently and effectively managing operations. Whether an organization delivers a service or manufactured product, operations management plays a key role in achieving its strategic objectives. This course is designed both to reinforce the tools and techniques required to manage operations and to demonstrate the coordination required between operations and other functional areas. The importance of process choice as it relates to competitive priorities and the concept of manufacturing strategy are discussed in detail. Class discussions, exercises, case analyses and a simulation game provide the vehicles for developing decision making, communication, interpersonal and leadership skills that are essential for managers in operations and supply chain management.

BUS 640. Advanced Financial Decision Making **3 credits**

This course provides an exploration of advanced financial management topics applied in a case-based format. The course extensively uses teams and Excel modeling as students study, analyze and recommend decisions in areas related to capital budgeting, financing, cost of capital, working capital management, mergers, dividend policy and other current topics.

BUS 645. Business Policy and Strategy **3 credits**

Business policy deals with the development of strategy formulation and implementation. In order to appropriately formulate a business policy, most businesses must also consider international opportunities and competition. Therefore, this course examines the complexities of corporate operations in different cultures. This course reviews competitive strategy by analyzing business cases. It incorporates a synthesis of various issues dealing with ethics, management, marketing, labor, developing countries, governmental relations, competition and intellectual property.

BUS 695. Integrative Capstone Experience **3 credits**

The class focuses on providing experience in the strategic management process, including strategy formulation, implementation, management and evaluation. The purpose is to provide a broad overview of both strategic management theories and concepts and skill development within a dynamic team-based learning environment. The principal objective is to allow students to integrate their theoretical business knowledge of the fundamental management disciplines together with practical business experience.

GRADUATE PROGRAM IN EDUCATION

Rose Ann Donovan	Assistant Professor
Kimberly K. Hofkamp	Assistant Professor Director of Clinical Experience
Kathrine Kramer	Assistant Professor Coordinator of Learning Communities
Kerry Kretchmar	Assistant Professor
Robert Pickett	Assistant Professor
Pamela Pinahs-Schultz	Assistant Professor
Elise Riepenhoff	Assistant Professor Director of the Milwaukee Writing Project
Wilma J. Robinson	Associate Professor Director of Graduate Programs
Rachel Stickle	Assistant Professor
Bruce L. Strom	Associate Professor
Edie M. White	Assistant Professor
Kimberly R. White	Assistant Professor

The Carroll University graduate program in Education is designed to serve students seeking a Master of Education (M.Ed.) Degree, who are working in a variety of educational contexts. Students can also take classes for individual professional development and/or to extend their professional certification.

Through the Department of Education, the University offers flexible master's degree programs designed to empower professionals who want to combine professional development with their work and family responsibilities. The curriculum blends emphases on professional skill development and mastery of knowledge to create a learning environment where adults thrive. Built on current theory and practice, the program is of particular interest to K-12 teachers, post secondary and technical university educators, corporate trainers, health education professionals, and adult educators/trainers.

The graduate program extends the University's mission of providing excellence in teaching at all levels. An intensive approach is utilized to help educators strengthen their professional abilities. The program concentrates on the improvement of teaching and learning in settings where teachers, instructors or trainers are currently working, or where they anticipate the opportunity to teach at some future time.

The M.Ed. program relies on a curriculum that includes three content emphases: curriculum and instruction, adult and continuing education, and health education with weekend options in the future. A Master of Education in an off-campus or on-campus learning community format is also available.

GRADUATE PROGRAM IN EDUCATION

Learning Outcomes

All M.Ed. students are expected to demonstrate an understanding of:

- A. Classic and contemporary learning theories and instructional strategies appropriate to the discipline.
- B. Assessment and/or evaluation of processes, programs and/or curricula based on the needs of learners or the organization to implement change or appropriate instructional strategies in a professional context.
- C. The socio-contextual factors that influence interactions in an intercultural society.

Students must also demonstrate:

1. Increased capacities for higher order thinking skills to consider multiple perspectives.
2. Demonstrate collaborative skills and the ability to develop and support partnerships with colleagues, agencies, and community organizations.
3. Ability to view problem solving and change from the perspectives of the individual, organization, and larger socio-economic system in an intercultural society.
4. An increased ability to reflect critically on theory and practice resulting in the integration of knowledge into practice.
5. Effective utilization of current technology, and its application in a professional context.
6. The ability to read critically, interpret and evaluate research.
7. The skills necessary for systemic inquiry, through engagement in the research process, including data collection, analysis, and communication of results.

Commonly aligned between undergrad and graduate programs:

- Intercultural understanding
- Cultural sensitivity
- Reflection

GENERAL DEGREE REQUIREMENTS

The M.Ed. is a 33-credit program. After review, nine credits in Education courses with grades of B and above may be transferred toward the master's degree from other accredited institutions after review by the chair. Course syllabi are required for review of course content. (This option is not available for Learning Communities.)

Students may enter the program at the start of any academic term throughout the year. Students must be registered for a minimum of 6 credits to be eligible for financial aid.

The graduate program in Education at Carroll requires the completion of research related to the course of study. This experience allows students to study an issue in greater depth that is important to their professional interest or to improve practice. Graduate students are strongly encouraged to have a laptop.

GRADUATE PROGRAM IN EDUCATION

ADMISSION

Applicants begin the admission process by completing a Carroll University Graduate Studies Application. Applications and official transcripts of all previous post-secondary coursework are submitted to the Carroll University Graduate Admission Office.

Applicants must have an undergraduate degree from an accredited college or university and an undergraduate grade point average of 2.5 on a 4.0 scale. Admission decisions are made when applications are complete.

Applicants may complete up to 9 credits as a non-degree graduate student prior to being formally admitted to the graduate program.

A Carroll undergraduate student with senior status may enroll in a graduate course with the permission of the director of the graduate education program.

ACADEMIC PLANNING

Initially, interested students meet with a Graduate Admission Counselor to discuss how their background and educational goals relate to the graduate education program. They will then work closely with an M.Ed. adviser to design their curriculum.

Most graduate education students attend Carroll on a part-time basis. Classes are generally taught in the evening with some daytime summer classes in some emphasis areas, or through a 50/50 blended Saturday option.

The Master of Education in Learning and Teaching Learning Community Program meets one weekend a month over a two-year period. Students enroll in 9 credits each semester for the first three semesters, and 6 credits during the last semester. Learning Communities are offered on weekends. Half-time students enroll in 6-8 credits per semester while full-time students enroll in at least 9 credits per semester (at least 6 credits are needed to qualify for financial aid).

Once students begin the graduate education program, they are given seven years to complete the program. Students who interrupt their studies for one full academic year must reapply and must follow any new requirements upon re-entering. Graduate students are strongly encouraged to have a laptop computer.

TUITION

Tuition for graduate courses in education for 2011-12 is \$440 per credit; \$150 per credit to audit a course; and \$400 per credit for OCICU courses.

FINANCIAL ASSISTANCE

Financial aid in the form of student loans is available to M.Ed. students who are enrolled at least on a half-time (6 credits per semester) basis. Refer to page 92 for complete information regarding financial assistance.

For further information, call the Office of Financial Aid at 262.524.7296.

GRADUATE PROGRAM IN EDUCATION

TRANSFER CREDITS

With approval of the graduate program director, up to nine semester hours of graduate coursework in education, taken within the past seven years, may be transferred from other accredited colleges or universities. Transfer courses are evaluated on an individual basis. Students must provide a course syllabus for specific course content review. Transfer graduate credits (or previously earned Carroll graduate credits) can be used to reduce the program requirement of 33 semester hours only if the transfer courses (or Carroll courses) are deemed by the director to form a legitimate content strand by themselves, to either duplicate offerings in the program or complement one of the program's existing emphases, or to transfer in as an elective. Because of the nature of the Master of Education in Learning and Teaching, no graduate credits earned from other institutions may be transferred into the program.

MASTER OF EDUCATION PROGRAM (33 credits)

Core Courses (12 Credits)

EDU 641, Teaching and Learning Across the Lifespan (3 credits)

EDU 601, Educators as Researchers (3 credits)

EDU 602, Structuring Inquiry: Framing and Researching a Problem (3 credits)

EDU 603, Data Collection and Analysis (3 credits)

There are three distinct emphases in the M.Ed. Program: Curriculum and Instruction; Adult and Continuing Education; and Health Education or Community Health Education. Students choose one of the emphases in their graduate program.

Curriculum and Instruction Emphasis

- Students choose two of three content strands: Literacy, Contemporary Curriculum Issues, and Sociocultural Issues. Students must earn nine credits in each strand. Alternately, students may choose to earn the Wisconsin Reading Teacher License #316 as part of their M.Ed. program. This option requires completion of the Wisconsin Reading Teacher License #316 strand.
- Students must also complete three to six credits of electives from any strand or from other areas in the master's program.

Literacy Strand

EDU 620, The Writing Process: Theory and Practice (MWP)

EDU 621, Writing Across the Curriculum: Leadership Institute (MWP)

EDU 622, Writing Project Practicum: Publication (MWP)

EDU 625, Teaching the Writing Process

EDU 626, Teacher as Writer

EDU 675, Emergent Literacy

EDU 677, Issues in Children's and Adolescent Literature

EDU 678, Reading Assessment in the K-12 Classroom

EDU 680, Practicum in Assessing and Teaching Reading

EDU 691, Literacy in Upper Elementary Secondary/School Curriculum

(Replaces EDU 306 and EDU 324.)

Contemporary Curriculum Issues Strand (can include the adaptive education certification license #859)

- EDU 631, Cognitively Guided Instruction (CGI) in Mathematics – Workshop
- EDU 634, Applying Educational Technologies in K-12 Classrooms
- EDU 640, Foundations of Gifted and Talented Education
- EDU 643, Curriculum Making: Past and Present
- EDU 644, Education of Gifted and Talented Students – Workshop
- EDU 645, Collaboration in the Classroom
- EDU 654, Developing Multicultural and Global Curricula
- EDU 655, Families in Society
- EDU 660, Strategies for Diagnostic Assessment
- EDU 661, Language Development/Disorders of the Exceptional Child
- EDU 662, Instructional Strategies for Students with Special Needs
- EDU 663, Serving Students Beyond the Classroom
- EDU 664, Field Experience in Adaptive Education
- EDU 682, Supervision of Student Teachers: Theory and Practice (1-3 credits)

Sociocultural Issues (can include the Wisconsin alternative education license #952)

- EDU 650, Sociology of Education
- EDU 652, Culturally Responsive Teaching Practice
- EDU 653, Rethinking "At Risk" Students: Creating Promise
- EDU 654, Developing Multicultural and Global Curricula
- EDU 655, Families in Society
- EDU 657, Pedagogy for Alternative Learning Environments
- EDU 658, Philosophical/Ethical Issues in Education
- EDU 671, Understanding Self, Race, Gender and Class to Leverage Student Achievement

Wisconsin Reading Teacher License #316 Strand

- EDU 625, Teaching the Writing Process or
EDU 626, Teacher as Writer
- EDU 675, Emergent Literacy
- EDU 677, Issues in Children's and Adolescent Literature
- EDU 678, Reading Assessment in the K-12 Classroom
- EDU 680, Practicum in Assessing and Teaching Reading
- EDU 691, Literacy in Upper Elementary/Secondary School Curriculum (Replaces EDU 306 and EDU 324.)

Students pursuing the #316 license must have an initial Wisconsin teaching license and two years of full-time teaching experience.

Students seeking the #316 license must earn a grade of B or higher in each reading course and must have an overall minimum reading course grade point average of 3.00. A portfolio demonstrating proficiency in the

GRADUATE PROGRAM IN EDUCATION

Wisconsin Teacher Standards and International Reading Association Standards is required prior to licensure.

Adult and Continuing Education Emphasis

The Adult and Continuing Education Emphasis is designed to provide professionals who are engaged in educating adults in a variety of settings with the most current information possible in the practice, theory, and research relevant to this dynamic and expanding field. Adult education issues related to learning, curriculum, program planning, and administration are explored. Students research and prepare projects relevant to a variety of professional and educational settings. The 33 program credits consist of the core courses, electives and required courses.

Required Courses (12 credits)

EDU 646, Administration of Adult Education Programs

EDU 647, Foundations of Adult Education

EDU 648, Facilitating Learning for Adults

EDU 649, Curriculum and Program Development in Adult Continuing Education

Health Education

The Health Education Emphasis includes two strands: Health Education and Community Health Education. The strands are designed to provide the most current information available to professionals who are engaged in or focused on education, leadership and the promotion of the future well-being of our society.

The National Commission for Health Education Credentialing has specific requirements for receipt of Certified Health Education Specialist (C.H.E.S.) status. The criteria include a minimum level of participation in health education degree granting programs as well as demonstration of basic competencies. The Health Education Emphasis meets National Commission criteria and addresses the competencies required for C.H.E.S. certification.

Currently licensed teachers can use components of this emphasis to obtain Wisconsin Health Education certification. This certification requires completion of Wisconsin Department of Public Instruction criteria at either the undergraduate or graduate level. Students choosing to obtain this certificate must complete BIO 130, BIO 140, HSC 101, HED 650, HED 651, HED 652, EDU683, and the PRAXIS II Health Content test. Successful completion of the Praxis II content test in Health, practicum and portfolio are required prior to licensure.

Health Education Strand

This strand prepares students for professional roles in health education and promotion. The primary objective of the curriculum is to provide the Health Educator with the knowledge and skills to plan, develop, implement, monitor and evaluate behavior change programs for improving health status. Courses feature methods for diagnosing and assessing the health needs of communities and organizations; theories of health behavior and their application, the planning and design of public health programs; approaches to measuring and monitoring the implementation of interventions; and

strategies for evaluating the impact of programs on cognitive, behavioral, and health status endpoints. The 33 program credits consist of the core courses, electives and required courses.

Required Courses (15 credits)

HED 650, Principles, Theory and Foundations of Health Education
HED 651, Planning and Implementation of Health Education Programs
HED 652, Evaluation and Assessment of Health Education Programs
HED 653, Principles of Health Behavior

Choose one of the following:

EDU 646, Administration of Adult Education Programs
HED 660, Epidemiology and Public Health Issues
HED 661, Resources for Health Education
HED 663, Public Health Policy and Administration

Community Health Education Strand

Community Health Education is a critical discipline that concerns itself with medical interventions that improve the health of a community. Its activities focus on the entire population rather than the individual patient. The mission of this Strand is to prepare health related professionals in a global society as effective intercultural communicators to administer, develop, implement, and evaluate Community/Public Health Education programs. Equally important, the program's goal is to develop and prepare future leaders for a variety of volunteer-based public health agencies, medical settings, worksite wellness initiatives and governmental base service programs. This strand, within Education's Health Education Emphasis, also meets National Commission criteria above for learning outcomes, thus program completers will be able to demonstrate the following competencies:

- Assess Individual and Community Needs for Health Education
- Plan Health Education Strategies, Interventions, and Community/Public Programs
- Implement Health Education Strategies, Interventions, and Programs
- Conduct Evaluation and Research Related to Community/Public Health Education
- Administer Health Education Strategies, Interventions, and Community/Public Programs
- Serve as a Community/Public Health Education Resource Person
- Communicate and Advocate for Health and Community/Public Health Education

The Community Health Educator Strand's 33 credits consist of the following:

HED 606, Statistical Methods for Health Sciences
HED 607, Graduate Professional Project in Community Health Education I
HED 608, Graduate Professional Project in Community Health Education II
HED 610, Graduate Professional Project Preparation (activates only if work in 608 is not completed)
HED 650, Principles, Theory and Foundations of Health Education
HED 651, Planning and Implementation of Health Education Programs
HED 652, Evaluation and Assessment of Health Education Programs

GRADUATE PROGRAM IN EDUCATION

HED 660, Epidemiology and Public Health Issues

HED 663, Public Health Policy and Administration

2 electives (in Adult and Continuing Education is recommended)

Master of Education Learning Community Program

The Learning Community Program combines the University's rich heritage and outstanding reputation in teacher education and adult education with a new and innovative curriculum and other disciplines. A Learning Community is a group of education professionals who take graduate education courses in a collaborative and learner-directed environment. With the assistance of facilitators, the class develops and shares a common vision for their work. The community provides a setting for thinking and learning about their professional practice, culminating in enhanced performance and a Master of Education degree from Carroll University. A Learning Community meets together one weekend a month over a two-year period. Currently the Master of Education is offered in the Curriculum and Instruction, and Adult Education Emphases. Graduate students are strongly encouraged to have a laptop computer.

General Degree Requirements

A Master of Education Learning Community is a 33-credit graduate program. Because of the nature of the program, no graduate credits earned from other institutions may be transferred into Carroll's Master of Education Learning Communities Program. Students may enter the program at the start of any new Learning Community and are expected to stay with the Learning Community throughout the duration of the two-year program. In some situations, students may decide to step out of the Learning Community; however, they may not rejoin the same Learning Community at a later date. They may join a newly forming Learning Community and will be expected to attend all sessions, but will not be required to pay tuition for a Carroll University graduate course that is part of the Learning Community curriculum for which they have already paid and successfully completed. Because of the format of the programs, students who step out of a Learning Community program may bring a maximum of 9 Learning Community and other graduate transfer combined credits into the traditional campus based program. All other policies of the Graduate Program in Education apply to all M.Ed. Learning Community Programs.

Note: Course sequence may vary by Community.

Learning and Teaching Course Work

Semester 1: (9 credits)

EDU 606, Learning Community Theory and Practice (3 credits)

EDU 607, Introduction to Educational Research I (3 credits)

EDU 611, Culturally Relevant Teaching (3 credits)

Semester 2: (9 credits)

EDU 608, Classroom As Community (3 credits)

EDU 609, Educational Research II (3 credits) Core

EDU 612, Authentic Learning Assessment (3 credits)

GRADUATE PROGRAM IN EDUCATION

Semester 3: (9 credits)

EDU 613, Educational Leadership Theory and Practice II (3 credits)

EDU 614, Educational Research III (3 credits)

EDU 617, Educators as Leaders (3 credits)

Semester 4: (6 credits)

EDU 615, Educational Leadership Theory and Practice III (3 credits)

EDU 616, Educational Research IV (3 credits)

Note: Course descriptions are included at the end of this catalog section.

LICENSE/CERTIFICATION PROGRAMS

The following programs can be taken for licensing or certification only.

THE WISCONSIN READING TEACHER LICENSE (#316) PROGRAM

Graduate students who have an initial Wisconsin teaching license and two years of full-time teaching experience can qualify for an additional license as K-12 Reading Teachers by completing Carroll's Reading Teacher sequence. EDU 675, 677, 678, and 680 compose the graduate level requirements for the #316 license. Students seeking the #316 license must earn a grade of B or higher in each reading course and must have an overall minimum reading course grade point average of 3.00.

Note: A new EDU 600 level course (Literacy in Upper Elementary/Secondary School Curriculum) will be replacing 306 and 324. Please consult with an M.Ed. Advisor before registering.

THE WISCONSIN ALTERNATIVE EDUCATION CERTIFICATION

A set of four courses provides the competencies teachers need to qualify for the Alternative Education License Certificate (#952). Effective July 1, 1996, this early adolescent certification is required by the Wisconsin Department of Public Instruction for all teachers who teach students in nontraditional environments. The four courses, EDU 653, 655, 657 and 683, may be taken without enrollment in the M.Ed. program, or they may count toward degree completion in the C & I emphasis.

WISCONSIN ADAPTIVE EDUCATION LICENSE

This five course sequence, combined with a field placement, will enable credentialed teachers to earn the #859 license at the graduate level. The coursework enables teachers to work effectively with special education students who are mainstreamed or integrated into their classrooms. Students enrolled in the certification sequence will maintain a portfolio that will include selected information from each course, demonstrating how the competencies they are acquiring are applied to their particular educational contexts. A course in the education of the exceptional child is a prerequisite. Courses can be combined with the M.Ed. program in the contemporary curriculum issues strand or taken for licensure only. The courses are EDU 660, EDU 661, EDU 662, EDU 663, EDU 664.

GRADUATE PROGRAM IN EDUCATION

COURSE DESCRIPTIONS – Traditional M.Ed. Programs

EDU 601. Educators as Researchers

3 credits

The course uses a variety of approaches to study today's complex educational and professional issues for students to become familiar with both quantitative and qualitative approaches to inquiry. Students develop an understanding of multiple research designs to become critical consumers of research. They also identify a research question, develop a research proposal, and begin writing their master's thesis. In addition, they initiate mentoring and support group relationships, which will be maintained throughout the research process, and attend library, statistical and formatting sessions to support further inquiry for thesis development. Course outcomes include submission of a complete research proposal/plan, timetable for thesis completion, Institutional Review Board form, and final draft of Chapter One. Prerequisite: minimum of 18 graduate credits.

EDU 602. Structuring Inquiry: Framing and Researching a Problem

3 credits

Focus is on conducting research as a basis for improving professional practice. Students extend research projects by refining the literature review, research design and methodology, timetable for thesis completion, and begin to collect data that will serve as a foundation for EDU 603. Participation in mentorships, primary support groups, library, statistical, and formatting sessions is a continuum. Course outcomes include final drafts of Chapters One, Two and Three, and a timetable for thesis completion. Prerequisites: EDU 601.

EDU 603. Data Collection and Analysis

3 credits

Students broaden their professional identities to include researcher as part of that identity. Student researchers collect and analyze data and complete the final thesis report and participate in a symposium to share their research with their peers and the Carroll community. Course outcomes are symposium participation, completed thesis and library deposit, and a scholarly article for publication based on the research findings. Prerequisites: EDU 601; 602.

EDU 605. Thesis Preparation

3 credits

Students who are unable to complete the outcomes while enrolled in EDU 603 are required to fill out an incomplete form (available online) to be signed by the research facilitator to be approved and submitted to the registrar. If approved, the student researcher will have eight weeks to complete the thesis. If unable to complete, the student must submit an action plan and a timeline for the completed thesis for approval to the class research facilitator. If approved, the student will register for EDU 605, Thesis Preparation. Students can register each semester thereafter, if there is evidence of satisfactory progress demonstrated through an action plan approved by the class facilitator. Prerequisites: EDU 601, 602; 603.

EDU 620. The Writing Process: Theory and Practice (MWP)

1-3 credits

Offered occasionally.

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EDU 621. Writing Across the Curriculum: Leadership Institute (MWP) 1-3 credits

Offered occasionally.

EDU 622. Writing Project Practicum: Publication (MWP) 1-3 credits

EDU 625. Teaching the Writing Process 3 credits

Through a variety of exercises, participants focus on their own writing to explore the writing process in developing authors. Basic writing theory is translated into applied writing instruction. Emphasis is on creating a classroom writing environment. Course includes development and assessment of writing portfolios.

EDU 626. Teacher as Writer: Facilitating Better Student Writing 3 credits

Students continue to deepen and individualize the use of the writing process as a means to curricular reform. Students define their areas of professional and personal writing expertise. Individuals and cohort groups work to develop a timetable for publishing writing-to-learn activities. Peer response groups are used and studied as a means to revise and edit in the classroom.

EDU 631. Cognitively Guided Instruction in Mathematics – Workshop 3 credits

Focuses on children's developmental phases in math/arithmetic skills and problem-solving activities. Engage in hands-on learning and teaching approaches to skill development in the four basic math operations. Share in group activities to produce math materials for classroom use. Emphasis is on math education in all elementary grades K-6.

EDU 634. Applying Educational Technologies in K-12 Classrooms 3 credits

This course provides practical opportunities to become proficient in 21st century skills and hands-on practice on a variety of technology tools including Web 2.0 and their integration into classroom instruction. Students explore current research to support technology in the classroom. Software that this course integrates includes: SMART Notebook, MS Word, PowerPoint, Publisher, etc. The Internet is used extensively. Every effort is made to meet the professional and educational needs of the students.

EDU 640. Foundations of Gifted and Talented Education 3 credits

Characteristics of giftedness are discussed. Several identification methods and programming models are studied, including the Wisconsin Comprehensive Integrated Gifted Programming Model. Students investigate the 5 areas of giftedness as defined by federal and state governments as well as the psychology of giftedness in children and adolescents including cognitive and social-emotional dimensions. Practical strategies for accommodating the needs of gifted and talented learners in the classroom and in the home are explored. Legal issues related to Wisconsin Standards are considered; critical perspectives on gifted education are explored.

EDU 641. Teaching and Learning across the Life Span (required) 3 credits

Reviews learning and developmental theories which underlie constructivist pedagogy and pedagogy for alternative educational settings. Presents current research related to the learning process. Studies the improvement of teaching and learning through facil-

GRADUATE PROGRAM IN EDUCATION

itation of thinking skills including creativity and critical thinking. Examines human development, including cognitive and social aspects, throughout life from childhood through adulthood. Situates the learning process in a sociocultural context.

EDU 643. Curriculum Making: Past and Present

3 credits

Examines the myriad of elements that determine curricular content and discusses the ways that the social, political, and historical contexts of the times have defined the education children have received in American public schools. Various theories and historical perspectives will be studied in understanding the struggles for and evolution of the American curriculum.

EDU 644. Education of Gifted and Talented Students – Workshop

3 credits

Emphasizes meeting the needs of gifted children through curriculum differentiation. Students develop programming strategies and techniques for accommodating gifted learners in the general classroom in ways that are aligned with the Wisconsin Comprehensive Integrated Gifted Programming (Pyramid) Model. Effective instructional practices related to each of the following areas of giftedness are studied: general intellectual, specific academic, creative thinking, leadership, and visual/performing arts.

EDU 645. Collaboration in the Classroom

3 credits

Participants examine theory and practice of cooperative learning and other collaborative and community-building strategies and investigate the cooperative learning literature to develop a repertoire of strategies. Strategies are critiqued for application to specific curricula and particular student groups.

EDU 646. Administration of Adult Education Programs

3 credits

This course relates administrative theory to current practice in adult continuing education. Topics covered include management styles, effective personal development, the tools of administrative practice, organizational contexts, and ethical decision-making. Effective leadership is distinguished from effective management. Prerequisite: EDU 641 and EDU 647, or consent of instructor.

EDU 647. Foundations of Adult Education

3 credits

This course introduces students to a variety of concepts which serve as the foundation of the field of adult education. Topics covered include a definition of adult education, a historical overview of the field, participation and nonparticipation factors, adult education in formal and informal settings. The course also examines six theories of learning as they relate to adult education and begins building the foundation for a theory of adult learning.

EDU 648. Facilitating Learning for Adults

3 credits

The course focuses on identifying special needs of the adult learner including the adult as an independent learner. The unique relationship between adult student and facilitator is explored. The course also examines current research and theory relating to successful practice in adult education. Prerequisite: EDU 641 and EDU 647, or consent of instructor.

- EDU 649. Curriculum and Program Development in Adult Continuing Education** 3 credits
Theory and processes of program planning and curriculum development as they relate to education and training programs designed for the adult learner. The focus is on program philosophy, program planning models, needs analysis, program design, and evaluation. Prerequisite: EDU 647.
- EDU 650. Sociology of Education** 3 credits
An overview of the sociocultural foundations of educational practice in a variety of community environments within the political and economic contexts of society. Focuses on historical ideas, current practices, and future directions in education in relation to major social issues in America. Analyzes the role of schooling in transmitting cultural assumptions about American society and its ideologies. Discusses sociocultural forces which influence schools, teaching and learning. Students review ethnographies and other forms of research to study education as a cultural institution.
- EDU 652. Culturally Responsive Teaching Practice** 3 credits
Focuses on what makes an effective learning environment for students of diverse backgrounds as a means for considering ways to improve learning contexts for all children. Examines the many pedagogies and practices which work effectively with students from a variety of backgrounds. Considers learning styles, language behaviors, participant structures, and social interactions all within the sociocultural context of the classroom and the school. Students design lessons/projects/learning environments to fit the sociocultural context of their own classrooms/schools.
- EDU 653. Rethinking "At Risk" Students: Creating Promise** 3 credits
"At Risk" is a term which is used to describe an increasingly large population of children who are linguistically, economically or ethnically different from the mainstream. Students critically analyze the educational, social, and political views of children "at risk" and explore alternatives of viewing such children as "at promise." Students address ways to view children's heritage and experiences as strengths rather than deficits, and consider strategies for implementing the "at promise" concept in classrooms, families, schools, and communities.
- EDU 654. Developing Multicultural and Global Curricula** 3 credits
Explores theoretical, political and cultural issues underlying the development and implementation of curricula with a broader perspective on culture in a global context. In light of these issues, students research and develop curriculum materials relevant to their individual teaching situation. Central course concepts include change, diversity, and interdependence and multiple cultures in a global framework. Students work to enhance both personal and professional literacy in theory, political, cultural and other issues.
- EDU 655. Families in Society** 3 credits
Explores contemporary family issues from the perspective of educators and public and social service workers. Reviews the history of the American family. Considers current family issues and questions related to dynamics and values, cross-cultural perspectives,

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alternative structures (including teen pregnancy, single parent families, etc.), and poverty (including homelessness, welfare reform, etc.). Examines changing roles of parents, feminization of poverty, divorce, child care outside the home, and family educational and social policies. In addition to academic sources, topics are explored through modern fiction and the media.

EDU 657. Pedagogy for Alternative Learning Environments 3 credits

This course is designed to explore and develop programs which will meet the needs of students who have not thrived in traditional school settings and thus have been identified as being "at risk" of not completing school. Research on existing and exemplary programs will be reviewed. An analysis of the needs of students will be made. Course topics include teaching with technology, building community, providing motivation, establishing a learning environment, and using appropriate assessment strategies.

EDU 658. Philosophical/Ethical Issues in Education 3 credits

Develops a "macro" view of the larger foundations affecting and driving education using theoretical, critical, and practical perspectives. By personally and collectively engaging with issues such as moral education, school reform, funding equity, popular culture, and the hidden curriculum, students will increase their situated awareness as a professional, encouraging thought and action beyond the walls of the classroom and the limits of their own history.

EDU 660. Strategies for Diagnostic Assessment 3 credits

Introductory course in diagnostic assessment. Provides core theoretical and practical background necessary to evaluate students having special education needs. Surveys familiar educational assessment of individuals with disabling conditions. Emphasizes testing for IEP development and applications for the individual contexts of practicing teachers. Teachers will become familiar with a variety of formal and informal assessment techniques enabling them not only to interpret psychological and academic reports, but also to carry on an ongoing assessment of the progress of the special education students enrolled in their class. Practical experience with testing will be provided.

EDU 661. Language Development/Disorders of the Exceptional Child 3 credits

Presents background information about normal language development of children as a foundation for evaluating speech and language disorders in children. Emphasis will be placed on current methods of identifying language disorders in school age students and methods for modifying classroom activities to enhance language skills of speaking, listening, reading, and writing.

EDU 662. Instructional Strategies for Students with Special Needs 3 credits

Considers strategies for modifications students with special needs may require to learn content knowledge. Environmental adaptations and varied approaches to delivering instruction will also be presented. Teachers will prepare examples of modifications appropriate for their teaching situations.

EDU 663. Serving Students Beyond the Classroom **3 credits**
Enables teachers to become effective collaborators with parents of exceptional children and with community agencies that also serve the needs of their students. Teachers will also explore effective practices for assisting individuals with disabilities in making successful transitions between grade levels and from school to post-secondary training and/or employment. Representatives of community agencies will be invited presenters in the class.

EDU 664. Field Experience in Adaptive Education **1 credit**
This 40 hour experience can be taken any time during the school year in teachers' own classrooms working with the special education students enrolled in their classes and the special education teachers who also serve these students. Interactive journals with the course instructor will be the primary vehicle for implementing this field work and assessing its success.

EDU 671. Understanding Self, Race, Gender and Class to Leverage Student Achievement **3 credits**
After reading research-based materials, teachers will engage in dialogue and reflection and will be provided strategies and support to address issues of race, class, and gender with their students and colleagues. The course is designed to tap urban teachers' experiences, concerns and dilemmas about serving the needs of urban, low-income and diverse (racially, ethnically, culturally and linguistically) students. Teachers will be reading and writing to learn about how social issues impact student achievement and will examine strategies to address classroom challenges more effectively. This course is designed and most appropriate for the urban educator. Others may enroll with consent of the instructor. With the exception of the first session, this is an online course. Students will receive instruction in the online course environment at the first session. High speed internet connection is recommended.

EDU 675. Emergent Literacy **3 credits**
Study of developmentally appropriate ways to facilitate emergent literacy of young children in the context of their lives in a literate community. Topics explored from constructivist and emergent literacy perspectives include early literacy, individualization through the child's personal experience, differentiation between formal reading programs and emergent literacy approaches, the roles of language experience and phonics in emergent literacy, curricular integration of emergent literacy approaches, and children's literature and language arts. Participants develop writing portfolios to explore their own development as readers and writers. Prerequisite: Consent of instructor if not certified to teach K-12.

EDU 677. Issues in Children's and Adolescent Literature **3 credits**
Explores controversial social and cultural issues through children's and adolescent literature. Provides in-depth experience in selecting and evaluating appropriate literature from different literary genres for students of varying abilities. Examines classroom activities to support the teaching of reading in K-12 classrooms. Prerequisite: EDU 675 or consent of instructor.

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EDU 678. Reading Assessment in the K-12 Classroom **3 credits**

The study of assessment and instructional techniques for readers with special needs. Includes selecting, administering, and interpreting formal and informal assessments to develop, implement, and communicate appropriate instructional plans to classroom teachers and to parents. Includes analysis and interpretation of diagnostic data to prescribe instructional programs and activities appropriate to student needs for a variety of group sizes using time, materials, strategies, learning styles, developmental levels, and student interests. Prerequisite: consent of instructor.

EDU 680. Practicum in Assessing and Teaching Reading **3 credits**

A supervised practicum in assessing and teaching reading to elementary, middle school, and high school students with a variety of abilities in one-to-one, small group, and large group contexts. Includes analysis and interpretation of diagnostic data to prescribe instructional programs and activities appropriate to student needs for a variety of group sizes using time, materials, strategies, learning styles, developmental levels, and student interests. Includes methods of communicating diagnostic findings to classroom teachers and parents. Prerequisite: EDU 675, EDU 677, EDU 678 or consent of instructor.

EDU 682. Supervision of Student Teachers: Theory and Practice **1 cr (or audit)**

This DPI-approved workshop qualifies licensed teachers to become cooperating teachers for the clinical experiences of student teachers seeking Wisconsin licenses. The qualification allows for the supervision of students from Carroll and from all other Wisconsin institutions who offer teacher education programs.

EDU 683. Graduate Internship in Education **1-3 credits**

Students are provided with a special field placement to explore individual professional interests in a selected teaching/learning environment. Offered upon request from interested students. Prerequisite: consent of instructor. Note: Teachers adding certification will be required to meet practicum/portfolio requirements.

EDU 691. Graduate Special Topics **1-3 credits**

Involves study of a selected current topic in education which is not offered in regular course offerings. The course may have a regular course format, or it may be offered as a short, intensive workshop. Offered in various terms for credit in a designated content strand.

EDU 698. Independent Study **3 or 6 credits**

Students pursue independent inquiry under the supervision of a faculty member. Offered each term for credit in a designated content strand. **A maximum of 6 independent study credits can be applied to the M.Ed. degree.** Prerequisite: approval of the chair and the Dean of the College and consent of instructor.

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COURSE DESCRIPTIONS – M.Ed. – Learning and Teaching Learning Community Program (Courses available through Learning Communities)

- EDU 606. Learning Community Theory and Practice** 3 credits
Explores the value of learning in a collaborative setting. Examines theories and key aspects of community development within the learning community and within their workplaces. (*Semester 1*)
- EDU 607. Introduction to Educational Research** 3 credits
Development of knowledge of action research and implementation of an action research study in the workplace. Covers all stages of the action research process. Emphasizes the value of data in making decisions regarding teaching and learning. Students begin an action research study. (*Semester 1*)
- EDU 608. Classroom as Community** 3 credits
Examines the relationship between individual and the group as it relates to teaching and learning. Explores sociocultural forces which influence the school environment, classroom culture, teacher and students. (*Semester 2*)
- EDU 609. Educational Research II** 3 credits
Extends refinement of student projects through the literature review. Students develop research design and methodology. (*Semester 2*)
- EDU 611. Culturally Relevant Teaching** 3 credits
Examines the sociocultural context of teaching and learning. Explores theories and practices which foster an equitable learning environment for learners from diverse backgrounds. (*Semester 1*)
- EDU 612. Authentic Learning & Assessment** 3 credits
Defines learning, assessment and education in a standards-based system. Identifies elements of learning and assessment with a focus on a balanced assessment process and data driven instruction. (*Semester 2*)
- EDU 613. Educational Leadership Theory and Practice II** 3 credits
Examines multiple organizational and leadership theories. Analyzes educational leadership practices and their influence on the teaching and learning environment. (*Semester 3*)
- EDU 614. Educational Research III** 3 credits
Develops advanced knowledge of action research and continues to implement an action research study. Students will implement research plan, collect data and begin analysis of findings. (*Semester 3*)

GRADUATE PROGRAM IN EDUCATION

EDU 615. Educational Leadership Theory and Practice III 3 credits
Continues the study of the value of organizational and leadership theories with and emphasis on the cultural and historical influences, knowledge and belief systems which shape educational organizations. (*Semester 4*)

EDU 616. Educational Research IV 3 credits
Students complete research project through the analysis of findings. A written and formal presentation of the research project culminates the research process. (*Semester 4*)

EDU 617. Educators as Leaders 3 credits
Application of leadership organizational theories in practice. Students develop or engage in active leadership roles in their educational contexts. (*Semester 3*)

COURSE DESCRIPTIONS – M.Ed. – Health Education Community Health Education

HED 606. Statistical Methods for Health Sciences 3 credits
This course provides the student with an overview of topics including experimental design, data presentation and summary, estimation, statistical inference and hypothesis testing, correlation and regression, ANOVA, nonparametric methods, Chi-Square analyses, and computing with SPSS. Applications in the health sciences will be emphasized. Statistical methods for description and analysis provide investigators with useful tools for making sense out of data.

HED 607. Graduate Professional Project in Community Health Education I 3 credits
The nature of the graduate project should be consistent with the career goals of the student, and should be viewed as a culminating display of ability, demonstrating that the graduate is prepared to expand professionally in the field of Community Health Education (CHE) in an intercultural society. This project will reflect excellence in writing, oral presentation, and practical experiences which are requirements essential to success in the field. The "manuscript format" for the professional project is intended to familiarize students with the rigors of preparing manuscripts for professional journals and/or successful grant submission. Prerequisite: HED 606.

HED 608. Graduate Professional Project in Community Health Education II 3 credits
This is a continuum of HED 607 and consistent with the career goals of the student should be viewed as a culminating display of ability, demonstrating that the graduate is prepared to expand professionally in the field of Community Health Education (CHE) in an intercultural society. This professional project will reflect excellence in writing, oral presentation, and practical experiences which are requirements essential to success in the field. The "manuscript format" for the professional project is intended to familiarize students with the rigors of preparing manuscripts for professional journals and/or successful grant submission. Prerequisite: HED 607.

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HED 610. Graduate Professional Project Preparation 1 credit
This course activates only if a student does not complete 608; this gives extra time to complete the project and report report. Prerequisite: HED 607 and 608.

HED 650. Principles, Theory and Foundations of Health Education 3 credits
This course will engage students in critical thinking and discussion about the history and evolution of health education. Students will analyze the foundations of the discipline of health education, predict the impact of the social value systems in programming, apply ethical and cultural considerations in health education, and critically analyze current and future needs. The course will also examine psychosocial factors related to health and illness behavior, self management interventions for chronic illness, self management interventions for chronic illness, and various health behavior models to determine health benefits and behavior strategies for health behavior changes at the individual, group and community level.

HED 651. Planning and Implementation of Health Education Programs 3 credits
This course will provide students with the theoretical and practical bases for effective implementation and evaluation of Comprehensive School Health Education (CSHE) programs. Students will be engaged in the development of logical scope and sequence in curricular construction, design programs based on data analysis, use social marketing principles, and exhibit competency in carrying out planned programs.

HED 652. Evaluation and Assessment of Health Education Programs 3 credits
This course will provide students with the knowledge and skills regarding various methodological approaches utilized in program assessment and evaluations. The course will focus on primary (survey, focus group) and secondary (agency statistic) data analysis. Emphasis is placed on a variety of school and community settings. Prerequisite: HED 651 or consent of instructor.

HED 653. Principles of Health Behavior 3 credits
This course will examine the psychosocial factors related to health and illness behavior. Various health behavior models will be examined to determine health benefits and behavior strategies for health behavior changes at the individual, group and community level, and self management interventions for chronic illness.

HED 660. Epidemiology and Public Health Issues 3 credits
This course will provide a comprehensive overview of epidemiological research with regard to the distribution and determinants of disease risk factors in human populations. Students will obtain and analyze health related data about social and cultural environments, growth, and developmental factors, needs, and diseases of populations. (*Course to be offered in Sp, odd years*)

HED 661. Resources for Health Education 3 credits
This course is designed to enable participants to select and use various health education services, materials and technologies in order to foster communication between health care providers and consumers. Students will develop plans for coordinating services, facilitate cooperation between program personnel, organize training for edu-

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cators, utilize computerized health information, and establish effective consultative relationships.

HED 663. Public Health Policy and Administration

3 credits

This course provides insight into and understanding of health policy concepts, issues, practices and their consequences. By the end of the course, each student will be expected to synthesize and integrate knowledge to apply theory and principles in ways consistent with professional practice as a health policy analyst in a intercultural society. The course will provide students with the knowledge and skills needed to understand and effectively manage individuals and groups within health services organizations, and blend theory and practice through lectures, discussions, writing assignments, case studies, and a capstone semester assignment in which each student will be responsible for conducting a comprehensive health policy analysis.

PHYSICIAN ASSISTANT STUDIES PROGRAM

Russell W. Harland	Associate Clinical Professor Program Director
Michelle Heinan	Associate Clinical Professor Assistant Program Director
Ann LeBaron	Assistant Clinical Professor Clinical Coordinator
Robert Schellinger	Assistant Clinical Professor Medical Director

The Carroll University Master of Science in Physician Assistant Studies Program has Provisional Accreditation from the Accreditation Review Commission on Education for the Physician Assistant (ARC-PA) and approval from HLC/NCA.

The Mission of the Master of Science in Physician Assistant Studies Program is to educate physician assistants to provide comprehensive quality health care to all, to be respectful of patient values, to be committed to ethical principles and to be grounded in evidence-based practice and clinical reasoning. Graduates will contribute to the profession and their communities and be prepared to practice medicine in a variety of primary care settings under the supervision of physicians. Graduates will also be prepared to provide service to medically underserved communities and diverse patient populations.

To achieve its mission, the Master of Science Physician Assistant Studies Program has three goals:

1. To develop highly skilled, interdisciplinary prepared primary care physician assistants who demonstrate the medical knowledge to provide optimal patient care.
2. To develop highly skilled primary care physician assistants who are prepared using an interdisciplinary approach and who regularly assess, evaluate and improve their patient care practices.
3. To develop highly skilled primary care physician assistants who demonstrate interpersonal and communication skills that result in effective information exchange with culturally diverse patients and families, professional associates, and a diverse health care system.

The curriculum includes core knowledge about the established and evolving biomedical, clinical preparatory, behavioral and social sciences; informational literacy; health policy and professional practice; and the application of this knowledge to patient care through supervised clinical practice and practicums. The curriculum is of sufficient breadth and depth to prepare students for clinical practice of medicine and assist students in becoming critical thinkers who can apply the concepts of medical decision making and problem solving. Building on Carroll University Health Sciences Area's

PHYSICIAN ASSISTANT STUDIES

commitment to provide service to culturally diverse populations, there is emphasis on primary care, cultural competency, and Hispanic health care.

The philosophy of the curriculum incorporates both traditional and case-based learning concepts and culminates with a true problem-based learning experience (Capstone). A systems-based curriculum model integrates knowledge, provision of services, and reflection. Common themes across the curriculum include ethical inquiry and practice, professionalism, scientific inquiry, critical thinking, problem solving, decision making as incorporated into the clinical practice and clinical research models, the presentation of content across the lifespan, and exploration of the effects of gender, culture, and cognitive level on content. There is collaborative teaching across courses with planned redundancy of subject matter. Constant reinforcement of content with clinical experiences occurs through observations of and exposure to patients in academic courses, service-learning, and clinical rotations. The students learn in an interdisciplinary health care and graduate environment that promotes interdisciplinary clinical practice and life-long learning. Ongoing self, student, peer, program, and professional assessment occurs to ensure that the program is reflective of optimal practice.

The physician assistant studies program is a cohort model, 24 months in length, requiring 110 credit hours to complete. The first year, Year 1 of curriculum, is 12 months and consists of 62 credit hours of didactic courses and integrated service-learning practicums in medically underserved communities in southeastern Wisconsin. Year 2 of the curriculum (consisting of 48 credits), is 12 months of clinical rotations plus the completion of a Capstone project.

ADMISSION

Admission to Carroll University Master of Science in Physician Assistant Studies Program requires a bachelor's degree and satisfaction of prerequisite coursework. The program admits qualified students regardless of race, color, creed, gender, age, sexual orientation, marital status, national or ethnic origin or handicap that does not interfere with the performance of professional physician assistant practice as provided by law.

Carroll University will be using Central Application Service for Physician Assistants (CASPA) to collect admission materials which will be forwarded to the university.

- Application deadline date is November 1, 2011
- Candidates will be chosen for on-campus interviews in December-January

In order to apply, applicants must comply with the following.

1) Prerequisite qualifications

- (A) Completion of all prerequisite courses – see list below
- (B) College cumulative GPA of 3.0 or greater out of 4.0
- (C) GPA of 3.0 or greater out of 4.0 for the required prerequisite courses
- (D) A minimum of 150 hours of patient care experience or a combination of patient care, volunteer activities and mentor shadowing

- 2) Required application materials include:
 - (A) Application material submitted to Central Application Service for Physician Assistants (CASPA) including:
 - a. Background student information
 - b. Clinical Experience Documentation Form
 - c. Three letters of reference: (1) Letter from a licensed physician assistant, M.D., D.O., or health care professional, (2) Letter from a college instructor, and (3) Letter from a supervisor from a work or volunteer clinical experience.
 - d. Personal essay
 - e. List of course work completed and in progress
 - f. Documentation of college and community service activities
 - g. Self reported GRE scores – exam date within past 5 years.
 - (B) Carroll Supplemental Application includes:
 - a. Safety Technical Standards Form
 - b. Student information form
- 3) Requirements upon offer of an on-campus interview
 - (A) Official transcript from all institutions of higher education attended.
 - (B) Official GRE Score Report sent directly to Carroll University (university code 1101)
- 4) Requirements prior to beginning the program
 - (A) Official transcript from all institutions of higher education attended.
 - (B) Official final transcript show completion of BA or BS degree

Required Prerequisites

The following courses must be successfully completed prior to beginning the physician assistant studies program. Because of the rapid evolution of the basic sciences and the rigor of the program, it is highly recommended that applicants who have completed the prerequisite coursework greater than five years prior to application review course materials if accepted into the program. Applicants to the Carroll University PA program may complete no more than two prerequisite courses online. However, online format is NOT acceptable for anatomy/physiology courses.

- a. Biology with laboratories (5 semesters)
 - Introductory Biology – [BIO 120/125]
 - Microbiology – [BIO 312]
 - Anatomy and Physiology – [BIO 130/140 or 402/403]
- b. Chemistry with laboratories (4 semesters)
 - Introductory Chemistry – [CHE 109/110]
 - Organic Chemistry – [CHE 203]
 - Biochemistry – [CHE 308]
- c. Statistics (1 semester)
 - Introductory Statistics – [MAT 112, MAT 312 or PSY 205]
- d. Mathematics (1 semester)
 - Pre-Calculus or Calculus – [MAT 130, 140 or 160]
- e. Psychology (1 semester)
 - Introductory Psychology – [PSY 101]

PHYSICIAN ASSISTANT STUDIES

Students need not have received their bachelor's degree from Carroll University, but those who do will receive additional admission points.

The materials above will be used to evaluate the potential of applicants to succeed in the program and will be used to select students for an on-campus interview. Students will be admitted to the Master of Science in Physician Assistant Studies program based on their admission materials and their interview.

Carroll University will not accept transfer credits for any required course in the Physician Assistant Studies Program. No advanced placement will be granted for any reason including prior academic studies or professional experience.

Students are required to have completed a health screening and updated immunizations according to current CDC recommendations for health professionals before they begin the PA program.

TECHNICAL STANDARDS FOR ADMISSION TO AND PROGRESSION IN THE PHYSICIAN ASSISTANT STUDIES PROGRAM

The Physician Assistant Studies Program requires that a student possess the ability to meet the requirements of the program. Though the program may modify certain course requirements in order to provide persons who are handicapped with an opportunity to achieve results equal to those of a person who is not handicapped, there are no substitutes for the following essential skills. The applicant must initially meet these requirements to gain admission to the program, and must also continue to meet them throughout participation in the program.

1. **Physical requirements:** The applicant/student must be willing and capable of performing the customary techniques for physical assessment, such as visual observation, auscultation, percussion and palpation. The applicant must be able to perform physician assistant procedures such as suturing, splinting, venous and arterial puncture and cannulation, bladder catheterization, nasogastric tube placement, emergency procedures such as cardiopulmonary resuscitation, suctioning of airway, endotracheal intubation, operation of cardioverter/defibrillator, and application of routine first aid procedures.
2. **Communication:** The applicant/student must be able to elicit information, describe changes in health, mood, and activity, and perceive nonverbal communication. The applicant/student must be able to communicate effectively and sensitively with patients and all members of the health care team.
3. **Intellectual ability:** The applicant/student must be competent in problem solving skills including measurement, calculation, reasoning and analysis.
4. **Behavioral and social attributes:** The applicant/student must be able to tolerate physically taxing workloads, function effectively under stress, adapt to changing environments, display flexibility, learn to function in the face of uncertainties inherent in the evaluation and treatment of patients, and must possess integrity, compassion, effective interpersonal skills and be motivated for a career in health care.

The student/applicant must be able to work with patients who have serious illnesses, infectious or terminal diseases and severe emotional disorders.

The physician assistant studies program requires that the applicant/student undergo a physical examination. An applicant/student who is handicapped shall not, on the basis of his or her handicap (except those which would preclude the essential skills outlined above), be excluded from participation in, denied the benefits of, nor be subjected to discrimination in the physician assistant program.

CAREGIVER BACKGROUND AND CRIMINAL HISTORY CHECK

On October 1, 1998, the State of Wisconsin Department of Health and Family Services mandated that all persons who seek to be employed and/or licensed in the caregiver industry must fulfill the caregiver and background check requirements in Section 50.065 of the Wisconsin Statute. Prior to the first day of class, students are required to complete a background and criminal history check and drug screen and abide by university and state regulations pertaining to findings.

INSURANCE

Physician assistant students are required to have medical insurance. Those who are covered by a family or personal policy must provide the insuring company's name and the policy number on a waiver form sent to the student by the University's Business Office. For students without their own coverage, a group insurance policy is available through the university.

ACADEMIC PROGRESSION

Academic Progression Standards

Year – 1 / Didactic Progression Standards

1. A grade of C or better is required in all physician assistant year-1 courses. A student is placed on academic probation if they receive a letter grade of D or F in any physician assistant course. The student must repeat that course the next time it is offered before progressing to subsequent courses. This will delay the student's graduation date. When repeating a physician assistant course, a student may be required to successfully complete ancillary learning experiences including auditing other courses in that semester. A course may be repeated only one time. A student receiving a D or F in any two physician assistant courses is dismissed from the program.

To be removed from academic probation, the student must receive a grade of C or better when they repeat that course and satisfactory completion of all required course audits. If a student fails to meet this criterion for removal from academic probation, he/she will be dismissed from the program.

2. A student must obtain a grade point average of 2.75 or better each semester in year-1. If a student earns a year-1 semester grade point average of 1.99 or less, he/she will be dismissed from the program. If a student earns a year-1 semester grade point average between 2.00 to 2.74, he/she is placed on academic probation. The student

PHYSICIAN ASSISTANT STUDIES

may continue in the program as long as they received a C or better in all courses during that semester. If a class is repeated, graduation will be delayed.

To be removed from academic probation, the student must earn a year-1 grade point average of 2.75 or better in the following semester or a grade of BC or better in the first clinical rotation schedule in the following semester. If a student fails to meet this criterion for removal from academic probation, he/she will be dismissed from the program.

Year – 2 / Clinical Progression Standards

1. A grade of BC or better is required in all physician assistant clinical rotations. A student is dismissed from the program if they receive a letter grade of D or F in any physician assistant clinical rotation. A student is placed on academic probation if they receive a letter grade of C in any clinical rotation or do not comply with the professionalism standards set forth by the program. The student must repeat that clinical rotation during the next available opportunity which may be in the summer after their clinical year. When repeating a physician assistant clinical rotation, a student may be required to successfully complete ancillary learning experiences or clinical competencies. A clinical rotation may be repeated only one time. A student receiving a C in any two physician assistant clinical rotations is dismissed from the program. If a rotation is repeated, graduation will be delayed.

To be removed from academic probation, the student must earn a grade of BC or better in the next clinical rotation. If a student fails to meet this criterion for removal from academic probation, he/she will be dismissed from the program.

End of Program Standards

The comprehensive written examination and summative OSCE will be administered at the end of the next to last clinical rotation. The capstone presentation will occur during the spring semester of year-2. If a student (1) fails the summative OSCE, (2) fails a written comprehensive examination or (3) receives a grade of D or F on the capstone, successful remediation (as determined by the faculty) must occur prior to graduation. If the student fails to successfully complete remediation, the student is dismissed from the program.

All Master of Science in Physician Assistant Studies program requirements must be completed in 24 months unless permission is otherwise granted by the Director of the Physician Assistant program.

At the end of each grading period the Health Science Academic Progress Committee (HSAPC) will meet to review the academic status of every student in the physician assistant program and ensure that all students meet the requirements necessary for graduation. The committee will consider the PA program progression standards and will make decisions within the context of the academic progression standards above. The committee is composed of core PA program faculty, the PA Program Director and faculty from physical therapy, athletic training and nursing. The purpose of the Health Science Academic Progress Committee is to ensure that every graduate of the Carroll

University PA program has the skills, knowledge, and judgment to assume the responsibilities of a physician assistant. Students with deficiencies will be notified by the Office of the Registrar within 10 business days after grades are submitted and will meet with the PA Student Progress Committee (SPC) composed of the core PA program faculty and the PA Program Director.

If the academic progression standards allow and the HSAPC decides to allow a student to complete remediation and continue in the program, the student will meet with the PA Student Progress Committee. The goal of this meeting is for the PA faculty and director to gain insight into why the student is having difficulty so that the committee can work with the student to redress the deficiencies. Other than the student, administrative assistant, witnesses as applicable and the committee members, no one else will be present at the meeting. If the sanction from the HSAPC includes academic remediation, the SPC will determine the nature of the remediation, monitor the progress of the remediation and return the student to HSAPC if they fail to meet the guidelines of remediation. The student will then either be placed on probation or be dismissed from the program. Students will also meet with the SPC if they have received negative comments on clinical rotations or are accused of unethical behavior, such as lack of professionalism, dishonesty, theft, and violation of patient confidentiality (See Disciplinary Procedures in the Student Handbook). The SPC will notify the student within five working days of their decision.

Appeal Process

The Academic Steering Committee acts as the appeal body for questions related to academic progression, academic policy, probation or dismissal, etc. The Student/Faculty Ethics committee acts as the appeal body for questions related to grades, integrity, and professionalism. A student wishing to appeal decisions by the HSAPC or SPC must follow the process indicated in the Carroll University Student Handbook.

POLICY ON READMISSION TO THE PROGRAM

The Policy on Readmission defines the process by which students may seek to be readmitted to the program following dismissal of the student from the program. Readmission candidates may apply for readmission to the program no sooner than eight months and no later than three years from the date of dismissal. Readmission candidates may exercise this option only once. Readmission candidates must submit the materials required of all applicants for admission. In addition, they must provide transcripts relating to any education experiences completed since leaving the program. A letter indicating why the readmission candidate believes they will succeed academically, technically, and professionally in the program must accompany the application materials. Upon review of the materials, the PA admission committee will render one of the following decisions: 1) Approval of the request for readmission to the program with the academic condition that the readmission applicant repeat the entire academic program or 2) denial of the request for readmission to the program. The decision of this committee is final.

GRADE APPEALS

Students and faculty should make every effort to resolve questions about grades without seeking a formal grade appeal. Students should seek a formal grade appeal only as a last resort.

All students who seek to appeal the assignment of a grade should understand that the evaluation of the extent of course mastery is normally within the province of the instructor for a particular course. Absent extraordinary circumstances, no grade adjustments or changes will be initiated. Therefore, students should make every effort to resolve questions without seeking a formal grade appeal.

Students may seek to appeal final course grades only if there is a valid basis to do so, supported by compelling documentation to show that the assignment of a grade was incorrect or was contrary to established Carroll University academic policies and procedures. Accordingly, appropriate grounds for grade appeals may include:

- A clerical error in the assignment of a final grade;
- The assignment of a grade on some basis other than the student's performance and participation in the course;
- The evaluation of the student's work by using criteria that is unnecessarily different from that used to evaluate other students in the same class;
- The assignment of a grade that reflects a significant departure from the instructor's published or announced standards for assigning grades.

The responsibility for developing and presenting the case for a grade change rests with the student making the appeal. Further, no appeal shall be received by Student/Faculty Ethics Committee absent evidence that the student attempted to address and/or resolve the matter individually with the faculty member responsible for assigning the grade at issue.

All grade appeals must be submitted, in writing, to the Student/Faculty Ethics Committee within the first three weeks of the academic semester immediately following the term in which the course was taken. A written statement clearly identifying the basis for the appeal must be submitted by the student, along with the following documentation: All assignments/project grades, test/quiz results, instructor comments and assessments related to the course/grade in question.

Once submitted, the Student/Faculty Ethics Committee shall meet to review the student's written statement and supporting documentation. The committee retains the discretion to consult with the faculty member who issued the grade to receive further information. The committee's written recommendation for resolution of the matter will be issued within ten school days of its receipt of the appeal. This recommendation shall be forwarded to the student, faculty member and PA Program Director

If the student seeks further review, the written basis for such a review, along with the supporting documentation, must be forwarded to Carroll University Provost within ten

school days of the issuance of the Student/Faculty Ethics Committee recommendation. Review of the matter and the issuance of a decision by the Provost shall be final.

STUDENT ACADEMIC INTEGRITY AND PROFESSIONALISM

All acts of academic misconduct are serious and in fact subvert the very nature of the academic process. Given the central role of academic integrity to all academic pursuits, the Student/Faculty Ethics Committee will review every incident of alleged academic misconduct. Should they be accused of misconduct, students will be subject to fair application of the Policies and Procedures on Student Academic Integrity. Academic misconduct violations include: committing plagiarism, fabricating or changing data or clinical logs, forging or falsifying academic documents or records, intentionally impeding or damaging the academic work of others, illicitly or maliciously accessing, altering, copying, using or damaging computer software or files, or any other academic violation of the Information Technology Acceptable Use Policy as stated in the Student Handbook.

For cases of academic misconduct in a particular academic course, the instructor of that course assigns an appropriate course sanction and the case is forwarded to the Student/Faculty Ethics Committee to consider the sanction, including program probation or dismissal.

FEES AND FINANCIAL AID

Graduate tuition for the Physician Assistant Studies Program is \$451.50 per credit plus \$952 for academic fees for students beginning in June 2012. Tuition for students beginning after June 2012 has not yet been determined.

The total program costs for students in the 2011-2013 Master of Physician Assistant Studies Program will be approximately \$54,582.

Note that while the year-1 program costs are finalized, the year-2 costs are yet to be established by the Carroll University Board of Trustees and are subject to change, which will change the total program cost.

Additional Equipment and Related Costs

Medical equipment	\$1,200.00*
Uniforms	120.00
Books (didactic and clinical years)	2,350.00
AAPA dues (highly recommended)	75.00
WAPA dues (highly recommended)	10.00
Drug screen	100.00/year**
Clinical Rotation Tracking System	75.00

*Depending on specific models chosen

**Depending on the facility

PHYSICIAN ASSISTANT STUDIES

Graduate students are not eligible for Carroll University financial aid grants. Students are eligible for graduate Unsubsidized Stafford Loans.

LICENSURE

Students are responsible for determining the requirements of and securing the application from the state in which they expect to be licensed.

CURRICULUM

The Carroll University Master of Science in Physician Assistant Studies program is a post-baccalaureate program divided into one year of course work with supervised clinical practicums followed by one year of clinical rotations. The program begins in June and runs full-time for two years. The 27 didactic courses are taught in five academic terms of 3 – 13 weeks in length. These courses provide the theoretical and practical background needed by physician assistants. Four supervised clinical practicums in the first year provide students with hands-on patient experience that allows students to integrate classroom learning with practical and clinical applications while providing service to the community. The practicum courses help students develop clinical skills, and emphasize wellness and prevention across the lifespan. Students participate in 12 months of full-time clinical rotations in the second year in the areas of Family Practice, Internal Medicine, Emergency Medicine, Obstetrics and Gynecology, Psychiatry, Pediatrics and General Surgery. An additional six week elective will be taken in either a medical or surgical subspecialty area. Clinical education experiences occur off campus, and thus a student must secure appropriate transportation. International physician assistant clinical experiences are available to students.

Due to the academic rigor of the Master of Science in Physician Assistant Studies program, students are strongly urged to avoid off-campus employment during any academic term in the year-1. Students are not allowed to work off-campus during the second year except in breaks between clinical rotations. Additionally, students are not allowed to work on-campus within the physician assistant program at any time during their first or second year.

MASTER OF SCIENCE IN PHYSICIAN ASSISTANT STUDIES: 112 Credits

Curriculum: Graduate Year 1

Summer — 17 credits

PHA 500, Human Gross Anatomy	6
PHA 501, Medical Physiology	3
PHA 502, Patient Assessment: History and Physical Exam	4
PHA 503, Introduction to Physician Assistant Profession	1
PHA 504, Introduction to Clinical Medicine	2
PHA 523, Practicum I	1

Fall — 16 credits

PHA 505, Clinical Medicine I	5
PHA 507, Pharmacology I	2
PHA 509, Clinical Diagnostics I	2
PHA 511, Psychology of Disease and Disability	2
PHA 519, OB/Gyn	2
PHA 521, Clinical Decision Making I	2
PHA 524, Practicum II	1

Winter — 5 credits

PHA 513, Evidence Based Medicine and Research	2
PHA 514, Medical Ethics	2
PHA 518, Geriatrics	1

Spring — 19 credits

PHA 506, Clinical Medicine II	5
PHA 508, Pharmacology II	2
PHA 510, Clinical Diagnostics II	2
PHA 516, Emergency Medicine	2
PHA 517, Pediatrics	2
PHA 520, Surgery	3
PHA 522, Clinical Decision Making II	2
PHA 525, Practicum III	1

May — 5 credits

PHA 512, Healthcare Systems, Health Policy and Administration	2
PHA 515, Clinical Procedures	2
PHA 526, Practicum IV	1

Year 1 Total Credits: 62 credits

Curriculum: Graduate Year 2

Required Clinical Rotations

PHA 620, Emergency Medicine	8 weeks	8
PHA 621, Family Medicine	8 weeks	8
PHA 622, General Internal Medicine	8 weeks	8
PHA 623, General Surgery	8 weeks	8
PHA 625, Pediatrics	4 weeks	4
PHA 626, Women's Health and Prenatal Care	4 weeks	4
PHA 627, Psychiatry and/or Behavioral Medicine	2 weeks	2

Elective Clinical Rotation

PHA 628, Elective Clinical Rotation	6 weeks	6
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PHYSICIAN ASSISTANT STUDIES

Required Capstone

PHA 630, Capstone Project

2

Year 2 Total Credits: 50 credits

COURSE DESCRIPTIONS

PHA 500. Human Gross Anatomy

6 credits

This course presents a comprehensive consideration of the human anatomy including both neuromusculoskeletal components and internal organ systems. Systems include musculoskeletal, neurological, genitourinary, gastrointestinal, skeletal, and cardiopulmonary. Biomechanical function, topographic and radiographic correlations, and clinical applications are emphasized. An in-depth understanding of the gross anatomy of the human body is obtained through lecture, audiovisual, computer and gross cadaver dissection. This is a lecture / laboratory course. (Su) Prerequisite: Admission to the Physician Assistant Program

PHA 501. Medical Physiology

3 credits

This course is an advanced study of the physiology of human organ systems focusing on blood and circulation, muscular, neuronal and sensory systems, renal and respiratory systems, digestion, metabolism, reproduction, and their control by the endocrine and central nervous systems that provide the basis for understanding disease and pharmacotherapeutic mechanisms. (Su) Prerequisite: Admission to the Physician Assistant Program

PHA 502. Patient Assessment: History and Physical Examination

4 credits

The course provides students with instruction in patient assessment and management including techniques for interviewing and eliciting a medical history, performing of a basic physical examination, and documenting patient data. At the conclusion of the course, the student is expected to be competent in eliciting a complete medical history and physical exam, appropriately documenting the exam including all positive and negative findings. Medical terminology is reviewed throughout the course. The elements of a comprehensive medical history and physical examination are presented and students practice these techniques in PHA 510. This is a lecture / laboratory course. (Su) Prerequisite: Admission to the Physician Assistant Program

PHA 503. Introduction to Physician Assistant Profession

1 credit

The course explores the factors affecting the development of the profession and the role of the physician assistant in today's healthcare system. Credentialing, policies, regulations governing the scope of practice, and professional organizations for physician assistants are explored. The course also examines quality assurance and risk management, legal issues, practice statutes, and rules regulating physician assistant practice in Wisconsin. Issues of professionalism, physician/physician assistant relationships, and ethical decision-making are introduced. (Su) Prerequisite: Admission to the Physician Assistant Program

PHA 504. Introduction to Clinical Medicine

2 credits

This course is an introduction to clinical medicine with focus on preventive medicine, screening guidelines and treatment protocols throughout the lifecycle. Emphasis is on disease prevention with attention given to the unique needs of diverse and underserved patient populations. Clinical genetics and immunogenetics are introduced linking current research to practical clinical medicine in advancing the understanding of the molecular basis of genetic concepts to practical clinical application. Introduction to oncology, its clinical presentation, diagnostics, and therapeutics, as well the role of preventive medicine in cancer, is addressed incorporating basic knowledge of gene expression and genetic patterns. *(Su)* Prerequisite: Admission to the Physician Assistant Program

PHA 505. Clinical Medicine I

5 credits

This course integrates the pathophysiology, clinical diagnosis, and management of a spectrum of disorders in the comprehensive presentation of the various disease processes commonly encountered in primary care across the spectrum of clinical medicine. Clinical Medicine I employs a system-oriented, problem based approach. Clinical information is presented in conjunction with appropriate, correlative lectures pharmacology, radiology, laboratory diagnostics, and nutrition. Organ systems covered in Clinical Medicine I include: otolaryngology, ophthalmology, dermatology, hematology, cardiology and pulmonary medicine. *(Fa)* Prerequisites: Successful completion of all courses in the summer term.

PHA 506. Clinical Medicine II

5 credits

This course integrates the pathophysiology, clinical diagnosis, and management of a spectrum of disorders in the comprehensive presentation of the various disease processes commonly encountered in primary care across the spectrum of clinical medicine. Clinical Medicine II employs a system-oriented, problem based approach. Clinical information is presented in conjunction with appropriate, correlative lectures pharmacology, radiology, laboratory diagnostics, and nutrition. Organ systems covered in Clinical Medicine II include: endocrinology, gastroenterology, urology, nephrology, orthopedics, rheumatology and behavioral medicine. *(Sp)* Prerequisites: Successful completion of all courses in the winter term.

PHA 507. Pharmacology I

2 credits

Therapeutic and drug product selection, including issues of efficacy, potential toxicities, compliance, monitoring parameters, drug interactions, and cost will be studied. The student will develop a rational approach to the selection of medications to be prescribed, and studies of medications used in the treatment of acute and chronic illnesses across the lifespan. Pharmacology I runs concurrently with Clinical Medicine I and focuses on the therapeutics associated with disease states presented in PHA505. Some information will be presented in a case study format using patient scenarios to develop clinical pharmacology knowledge. *(Fa)* Prerequisites: Successful completion of all courses in the summer term.

PHYSICIAN ASSISTANT STUDIES

PHA 508. Pharmacology II

2 credits

Therapeutic and drug product selection, including issues of efficacy, potential toxicities, compliance, monitoring parameters, drug interactions, and cost will be studied. The student will develop a rational approach to the selection of medications to be prescribed, and studies of medications used in the treatment of acute and chronic illnesses across the lifespan. Pharmacology II runs concurrently with Clinical Medicine II and focuses on the therapeutics associated with disease states presented in PHA 506. In addition, this course presents a review of the principles of pharmacology and examines legal and professional issues in prescribing. (*Sp*) Prerequisites: Successful completion of all courses in the winter term.

PHA 509. Clinical Diagnostics I

2 credits

This course is an introduction to radiologic imaging, clinical laboratory medicine, and ECG and cardiac diagnostics. The ability to select, perform, and interpret the results of basic clinical laboratory procedures is essential to the physician assistant's role and responsibilities in ordering and performing diagnostic tests and analyzing a data base to aid in formulating a preliminary diagnosis and management plan. Students emerge with an understanding of the indications for various modalities and significance of abnormal results. Diagnostics associated with the particular systems covered in Clinical Medicine I are discussed. (*Fa*) Prerequisites: Successful completion of all courses in the summer term.

PHA 510. Clinical Diagnostics II

2 credits

This course expands the student's medical, clinical and diagnostic skills. The principles, indications, interpretation, complications of, and contraindications to labs, diagnostics and imaging studies are discussed in a systems-based approach. This course runs concurrently with systems being covered in Clinical Medicine II. (*Sp*) Prerequisites: Successful completion of all courses in the winter term.

PHA 511. Psychology of Disease and Disability

2 credits

This course provides instruction in psychological development across the lifespan. Concepts in counseling and patient education skills necessary to help patients and families cope with injury and illness, adhere to prescribed treatment plans, modify behaviors to more helpful patterns are presented. This course also explores principles of violence and substance abuse, elder and child abuse including identification and prevention. This course provides instruction in the important aspects of patient care including preventive, acute, and chronic rehabilitative and end of life care. Psychological issues involved in each aspect of care such as response to illness, injury, end of life, and stress are presented. (*Fa*) Prerequisites: Successful completion of all courses in the summer term.

PHA 512. Healthcare Systems, Health Policy and Administration 2 credits

This course gives students a foundation in healthcare system knowledge. Students are oriented to basic components of the United States healthcare system. Issues and questions are presented and discussed in relation to their impact on citizens as well as practicing physician assistants. Topics include the historical underpinnings of healthcare policy, the healthcare system, hospitals, ambulatory care, quality assurance and

risk management in clinical practice, education, personnel, financing, insurance, managed care, mental health care, long term care, and other contemporary health care issues. Students evaluate, present, and debate pertinent issues presented in readings and lectures. The influence of culture on health care will be discussed. The relationship of socioeconomic status on healthcare will be explored. (May) Prerequisites: Successful completion of all courses in the spring term.

PHA 513. Evidence Based Medicine and Research **2 credits**

This course presents a review of basic statistics and its application to evidence-based theory as it pertains to epidemiology, public health, and the practice of clinical medicine. Modules in accessing computer based medically oriented information and medical data bases are presented. The course emphasizes the use of literature to validate and improve the practice of clinical medicine. Students identify, review, and critique published literature relevant to clinical settings. Students learn to use medical literature as a tool in clinical decision-making. (Wn) Prerequisites: Successful completion of all courses in the fall term.

PHA 514. Medical Ethics **2 credits**

This course examines prominent ethical issues in healthcare delivery. Students engage in discussion of ethical dilemmas relevant to clinical practice and the unique relationship of the physician and physician assistant. (Wn) Prerequisites: Successful completion of all courses in the fall term.

PHA 515. Clinical Procedures **2 credits**

The course provides the student with an overview of common clinical procedural skills and their indications, limitations, benefits and potential risks. Students perform clinical procedures that will be emphasized in the clinical phase of their education with an emphasis placed on aseptic technique, appropriate indications and contraindications, patient safety, and patient comfort. This is a lecture / laboratory course. (May) Prerequisites: Successful completion of all courses in the spring term.

PHA 516. Emergency Medicine **2 credits**

This course provides a comprehensive introduction to diagnosis and treatment of common and life-threatening patient presentations in the Emergency Department. (Sp) Prerequisites: Successful completion of all courses in the winter term.

PHA 517. Pediatrics **2 credits**

This course is an introductory pediatrics course which covers well child care, preventive pediatric medicine and the common problems encountered in the pediatric patient. The course employs a system-oriented, problem-based approach. Included in this course is a laboratory for students to practice physical exam on a pediatric patient. This is a lecture/laboratory course. (Sp) Prerequisites: Successful completion of all courses in the winter term.

PHA 518. Geriatrics **1 credit**

This course is an introduction into the biological aspects of aging, latency of disease, clinical geriatric syndromes, atypical disease presentations, drug prescribing and long

PHYSICIAN ASSISTANT STUDIES

term care of the elderly. An understanding of the special considerations and knowledge needed for clinical assessment and management of this special patient population is developed. Physical examination of the geriatric patient will take place as a practicum experience utilizing standardized patients. (*Wn*) Prerequisites: Successful completion of all courses in the fall term.

PHA 519. OB/GYN

2 credits

This course presents the fundamentals of gynecology, pathophysiology, screening and diagnosis of gynecological cancers; management of women's health problems, antenatal and postnatal care, recognition and management of complications of pregnancy, and basic management of normal/abnormal labor and delivery, and gynecological problems encountered in primary care. The pelvic exam will be taught utilizing teaching associates during the semester. This is a lecture/laboratory course. (*Fa*) Prerequisites: Successful completion of all courses in the summer term.

PHA 520. Surgery

3 credits

An introduction to the role of the physician assistant in surgery and surgical procedures commonly performed. The course employs a system-oriented, problem-based approach and clinical information is presented in conjunction with appropriate, correlative lectures in anatomy, physiology, pharmacology, pathology, radiology, laboratory diagnostics, and nutrition. This is a lecture/laboratory course. (*Sp*) Prerequisites: Successful completion of all courses in the winter term.

PHA 521. Clinical Decision Making I

2 credits

This course is designed to expand the student's medical knowledge base and facilitate critical thinking and clinical diagnostic skills. The student will develop differential diagnoses and order and interpret appropriate laboratory and imaging studies. Finally, students will demonstrate the ability to succinctly present a working diagnosis, treatment plan, and prognosis. This is a lecture/laboratory course. (*Fa*) Prerequisites: Successful completion of all courses in the summer term.

PHA 522. Clinical Decision Making II

2 credits

This course brings together the knowledge and skills developed previously so that the student can perform a comprehensive history and physical examination with complex patient cases. Critical thinking is an integral part of performing the examination through the development of a differential diagnosis and appropriate diagnostic strategies. Content includes presentation of behavioral and social concepts in medicine including personality development, normative responses to stress, psychosomatic manifestations of illness, sexuality, basic counseling skills, and emotional problems of daily living. This is a lecture/laboratory course. (*Sp*) Prerequisites: Successful completion of all courses in the winter term.

PHA 523. Practicum I

1 credit

This course is a 1-credit semester course intended to build upon basic interviewing skills that are introduced in PHA502. It will consist of a series of patient encounters, classroom discussions and readings relevant to working constructively with problems in clinician/patient communications. Common types of difficult patient interactions will

be addressed. Self-awareness is emphasized as the basis upon which clinicians develop an enhanced capacity for empathic listening and responsiveness. This course helps students to develop the competencies necessary for current and evolving clinical practice in a variety of practice settings with focuses on primary care, disease prevention, health promotion, and cultural competence with an emphasis on Hispanic health care. (*Su*) Prerequisite: Admission to the Physician Assistant Program

PHA 524. Practicum II

1 credit

Consistent with the Mission Statement, Goals, and Objectives, Practicum II provides Master of Science in Physician Assistant Studies students with practice-based, hands-on skills and experience which parallel didactic instruction during the semester. This course helps students to develop the competencies necessary for current and evolving clinical practice in a variety of practice settings with focuses on primary care, disease prevention, health promotion, and cultural competence with an emphasis on Hispanic health care. (*Fa*) Prerequisites: Successful completion of all courses in the summer term.

PHA 525. Practicum III

1 credit

Consistent with the Mission Statement, Goals, and Objectives, Practicum III provides Master of Science in Physician Assistant Studies students with practice-based, hands-on skills and experience which parallel didactic instruction during the semester. This course helps students to develop the competencies necessary for current and evolving clinical practice in a variety of practice settings with focuses on primary care, disease prevention, health promotion, and cultural competence with an emphasis on Hispanic health care. (*Sp*) Prerequisites: Successful completion of all courses in the winter term.

PHA 526. Practicum IV

1 credit

Consistent with the Mission Statement, Goals, and Objectives, Practicum IV provides Master of Science in Physician Assistant Studies students with practice-based, hands-on skills and experience which parallel didactic instruction during the semester. This course helps students to develop the competencies necessary for current and evolving clinical practice in a variety of practice settings with focuses on primary care, disease prevention, health promotion, and cultural competence with an emphasis on Hispanic health care. (*May*) Prerequisites: Successful completion of all courses in the spring term.

Clinical Rotation Overview

There are seven required and one elective clinical rotation. Required rotations include emergency medicine, family medicine, general internal medicine, general surgery, pediatrics, women's health and prenatal care, and psychiatry and/or behavioral medicine. Each rotation is between two and eight weeks in duration.

PHA 620. Emergency Medicine Supervised Clinical Practice

8 credits

The student is introduced to triage and stabilization of patients with life threatening conditions and procedures performed in the emergency medicine department. Emphasis is placed on skills required to perform and document a problem oriented history and physical, formulate a differential diagnosis, order and interpret the tests necessary to confirm or rule out a primary diagnosis, and give appropriate patient educa-

PHYSICIAN ASSISTANT STUDIES

tion. The student will learn strategies for interacting with patients and families in various levels of stress. (8 weeks) Prerequisites: Successful completion of year-1 courses.

PHA 621. Family Medicine Supervised Clinical Practice 8 credits

The student will evaluate, document, diagnose, and treat problems common in primary care/family medicine. The student will demonstrate proficiency in office procedures commonly performed in a family medicine office. (8 weeks) Prerequisites: Successful completion of year-1 courses.

PHA 622. General Internal Medicine Supervised Clinical Practice 8 credits

The student will perform in-depth evaluation and ongoing treatment of patients with complex problems and/or chronic illness. The student will evaluate and manage the effects of chronic disease on multiple body systems and perform or assist in procedures commonly done in internal medicine. (8 weeks) Prerequisites: Successful completion of year-1 courses.

PHA 623. General Surgical Supervised Clinical Practice 8 credits

The student will evaluate and manage patients with a variety of surgical problems. The student will develop an understanding of the role of the surgeon, anesthesiologist, assistant surgeon, circulating nurse, scrub nurse, scrub tech, recovery room nurse, and the surgery floor nurses, aides, and techs in the care of the surgical patient. (8 weeks) Prerequisites: Successful completion of year-1 courses.

PHA 625. Pediatrics Supervised Clinical Practice 4 credits

The student will provide care to the neonate through adolescent in outpatient and inpatient settings. The student will perform evaluation of the healthy pediatric patient and recognize, evaluate and treat the common illnesses and problems experienced by the neonate, infant, small child and adolescent to age 18 years. The student will identify and manage problems in growth and development of these age groups and recognize and manage pediatric emergencies. (4 weeks) Prerequisites: Successful completion of year-1 courses.

PHA 626. Women's Health and Prenatal Care Supervised Clinical Practice 4 credits

The student will provide care to female patients in the areas of women's health, prenatal care, and disease processes of the reproductive system. The student will evaluate, manage, and educate female patients regarding annual exams, birth control, infertility, menstruation, sexuality, pregnancy, pre- and postnatal care, menopause, and relationships. (4 weeks) Prerequisites: Successful completion of year-1 courses.

PHA 627. Psychiatry and/or Behavioral Medicine Supervised Clinical Practice 2 credits

The student will evaluate and manage patients with a variety of psychiatric problems. The student will develop an understanding of the role of psychiatrists, psychologists, social workers and nurses in the care of the psychiatric patient. Students will administer selected psychoactive pharmaceuticals. The student will perform a psychiatric

interview and mental status examination and make referrals for specialized psychiatric treatment. (2 weeks) Prerequisites: Successful completion of year-1 courses.

PHA 628. Elective Supervised Clinical Practice

6 credits

The student will select an elective clinical rotation, including but not limited to primary care, nephrology, interventional radiology, orthopedics, oncology, dermatology, or international medicine. (6 weeks) Prerequisites: Successful completion of year-1 courses.

PHA 630. Capstone

2 credits

This is a program-long project requirement. Student medical investigation is interwoven throughout the curriculum and the project is completed during the clinical rotations. The student will either present a detailed case presentation utilizing the medical literature to provide evidence based discussion of the management and plan or will use the medical literature to answer a case-related medical question or controversy using an evidence-based investigational approach. The student will complete a scholarly paper and present findings as an oral presentation as well as a poster at Celebrate Carroll in April of year-2. The student is encouraged to submit their respective project for presentation at the American Academy of Physician Assistant annual CME conference, in May of year-2. Successful completion of the Capstone requires satisfactory completion of the summative OSCE, comprehensive written examination and research project. Prerequisites: Successful completion of year-1 courses.

ENTRY-LEVEL PHYSICAL THERAPY PROGRAM

Sara M. Deprey	Clinical Associate Professor of Physical Therapy
Mark R. Erickson	Clinical Associate Professor, Director of Physical Therapy
Jane F. Hopp	Associate Professor, Dean
Christopher P. Hurley	Clinical Assistant Professor of Physical Therapy
David B. MacIntyre	Clinical Assistant Professor of Exercise Science
Amy E. McQuade	Clinical Assistant Professor of Physical Therapy
Thomas G. Pahnke	Clinical Associate Professor of Athletic Training and Physical Therapy
Brenda D. Reeves	Clinical Assistant Professor of Exercise Science
Kathleen A. Shields	Clinical Assistant Professor of Physical Therapy

The entry-level Doctor of Physical Therapy program is accredited by the Higher Learning Commission of the North Central Association and the Commission in Accreditation of Physical Therapy Education.

Societal demands and a changing health care environment affect physical therapy practice. The aim of the entry-level Physical Therapy program at Carroll University is to produce clinicians, trained for general practice in an evolving, diverse and interdisciplinary health care environment, who provide best care, respectful of patient/client values and grounded in evidence-based practice and clinical reasoning, and who contribute to the profession and their community. To achieve the program's aim, individuals associated with the program demonstrate effective teaching, scholarship, clinical practice, and service to the university profession and community.

Graduates of the entry-level Physical Therapy program are reflective, adaptable, accountable and competent to render independent judgments within a framework of collaborative health care practice. Graduates are prepared to practice in a caring, compassionate manner with moral sensitivity, social responsibility and awareness of individual differences. Pre-professional education is grounded in the liberal arts and the natural, behavioral, and social and health sciences. Professional preparation is in the basic sciences, behavioral sciences, applied sciences, health sciences and the science of physical therapy. Graduates are prepared to examine, evaluate, diagnose, make prognoses and provide interventions designed to rehabilitate patients/clients to optimal levels of function, prevent the onset of symptoms, and progression of impairments, functional limitations and disabilities that may result from diseases, disorders or injuries. Understanding professional practice, patient/client management and practice management expectations allow graduates to impact health care delivery systems in their communities. Graduates have a life-long commitment to self-directed learning and critical inquiry, recognizing that completion of their professional education is the first phase on a continuum of phases to mastery and competency in physical therapy.

ENTRY-LEVEL PHYSICAL THERAPY PROGRAM

Graduates contribute to the profession and society by seeking and disseminating knowledge gained and providing pro bono services.

The program aim is reflected in its curricular philosophy. The curriculum is developed around four tracks, incorporating both traditional and problem-based learning concepts. Each track is composed of courses that find their foundations in the same basic or professional science. The professional track presents material in a manner that develops content from general to applied concepts in professional practice, patient/client management, practice management, clinical decision making and evidenced based practice. The neurological, musculoskeletal and general medicine tracks present basic science, applied science in the absence of pathology, and applied science in the presence of pathology within the context of patient care. Across and within the four tracks are common themes that include ethical inquiry and practice, continuous integration of theory and practice across the curriculum, self-management of the learning process by students, and self-reinforcement whereby students learn because they value their growing competence. The curriculum includes both didactic and practical experiences. There is collaborative teaching within and across tracks and courses with planned redundancy of subject matter. Constant reinforcement of content with clinical experiences occurs through observations of, and exposure to, patients in academic courses, exposure to clients in the program's Teaching Laboratory Practice, and integrated clinical education.

To meet the program aim, a variety of individuals including, but not limited to, academic and clinical physical therapists; other professionals; basic, behavioral and social scientists; patients and care givers; and the community are involved in the program. These individuals facilitate learning and share their content expertise in their area of specialization. The academic, community and professional collaborations allow the program to link education to the reality of practice, anticipate future developments and keep a global perspective.

CURRICULUM

The entry-level Doctor of Physical Therapy program begins in the student's senior year, lasts eight semesters, and is subdivided into two phases, Phase I and Phase II.

During Phase I, course work in physical therapy begins at the 400 level. The 400-level courses present the basic, behavioral, professional and applied science foundations for the 500- and 600-level courses in Phase II. Bachelor's degrees are awarded to those individuals satisfying all relevant Carroll undergraduate requirements at the conclusion of the senior year.

Immediately following Commencement, students move into the graduate phase of the program, Phase II, where 500-level (summer, fall and spring terms of year five) and 600-level (summer, fall and spring terms of year six) courses in physical therapy are offered. Knowledge gained in each course is integrated throughout subsequent courses. The graduates participate in the University's Commencement ceremony in May.

ENTRY-LEVEL PHYSICAL THERAPY PROGRAM

ADMISSION

The physical therapy program admits qualified students regardless of race, color, creed, gender, age, sexual orientation, marital status, national or ethnic origin or handicap that does not interfere with the performance of professional physical therapy practice as provided by law. Students can enter the physical therapy program in one of three ways:

- 1) **Direct admission** - Individuals with direct admission status matriculate directly from high school into the pre-professional phase of the program. Upon earning undergraduate major with a prephysical therapy emphasis at Carroll, students progress to the professional phase of the DPT program.
- 2) **Non-direct admission** - If a high school senior does not qualify for or choose the direct admission option above and pursues an undergraduate degree at Carroll, the individual can apply, during his/her junior year, for the professional phase of the program. Preference will be given to students who complete 64 or more undergraduate degree credits at Carroll.
- 3) **Non-traditional admission** - An individual who has completed an undergraduate or graduate degree at another institution or at Carroll can apply for the professional phase of the program. Applicants must be eligible to return in good standing (be free of academic or disciplinary probation) to all institutions previously attended.

Applications and credentials for admission to the Physical Therapy program must be submitted for processing to the Carroll University Office of Admission. Decisions are made on applications throughout the year by a selection committee in the program, and applicants are immediately notified of their acceptance status through the Office of Admission. Under certain circumstances, admission to the program on probation status is possible.

TECHNICAL STANDARDS FOR ADMISSION TO AND PROGRESSION IN THE PHYSICAL THERAPY PROGRAM

Successful participation in the Physical Therapy program requires that a student possess the ability to meet the requirements of the program. Though the program may modify certain course requirements to provide a handicapped person¹ with an equivalent opportunity to achieve results equal to those of a non-handicapped person, there are no substitutes for the following essential skills. The applicant must initially meet these requirements to gain admission to the program, and must also continue to meet them throughout participation in the program.

1. **Physical requirements:** The applicant/student must be willing and capable of performing physical assessments (e.g., range of motion, manual muscle testing, visual observations) of patients using various evaluative and therapeutic instruments and equipment. The applicant/student must also be able to perform physical therapy procedures (e.g., transferring, treatment techniques, activities of daily living). In addition, an applicant/student must successfully complete and maintain certification in first aid and cardiopulmonary resuscitation.

¹ Handicapped as defined by the federal government pursuant to SS 504 of the Rehabilitation Act of 1973.

ENTRY-LEVEL PHYSICAL THERAPY PROGRAM

2. **Communication:** An applicant/student must be able to elicit information, describe changes in health, mood, and activity, and perceive non-verbal communication. An applicant/student must be able to communicate effectively and sensitively with patients. The applicant/student must also be able to communicate effectively and efficiently with all members of the health care team.
3. **Intellectual abilities:** Problem solving, a critical skill of physical therapists, requires abilities in measurement, calculation, reasoning and analysis.
4. **Behavioral and social attributes:** The applicant/student must be able to tolerate physically taxing workloads and to function effectively under stress; must be able to adapt to changing environments, to display flexibility, and to learn to function in the face of uncertainties inherent in the evaluation and treatment of patients; and must possess the qualities of integrity, concern for others, compassion, skill in interpersonal relationships, and motivation for a career in health care.

The Physical Therapy program may require that an applicant/student undergo a physical examination. An applicant/student who is handicapped shall not, on the basis of his or her handicap (except those which would preclude the essential skills outlined above), be excluded from participation in, denied the benefits of, nor be subjected to discrimination in the physical therapy program.

Students in the Physical Therapy program are required to complete the Carroll University Physical Therapy Intern Medical Information Form upon entrance into the program. This form documents information about the student's health insurance carrier, physician, medical conditions, vaccination history and completion of health risk training. A copy of the original documents remain on file in the program. Students carry a copy to each full-time clinical internship. It is the student's responsibility to update the information on this form on a yearly basis, or more frequently if necessary. Any medical treatment needed by a physical therapy student during academic preparation or clinical education experience is the responsibility of the student.

CAREGIVER BACKGROUND AND CRIMINAL HISTORY CHECK

On October 1, 1998, the State of Wisconsin, Department of Health and Family Services mandated that all persons who seek to be employed and/or licensed in the caregiver industry must fulfill the Caregiver and Background Check requirements in Section 50.065 of the Wisconsin statute. Entry-level Physical Therapy students are required, on the first day of class of the program, to complete a background and criminal history check.

INSURANCE

Health: Pre-professional and professional students are required to have medical insurance. Those who are covered by a family or personal policy must provide the insuring company's name and the policy number on a waiver form that is sent to the student by the University's Business Office. For students without their own coverage, a group

ENTRY-LEVEL PHYSICAL THERAPY PROGRAM

insurance policy is available through the University. Students are also required to have a personal health history form completed and on file at the University's health center.

Clinical facilities may require proof of immunizations or X-rays. The student is responsible for the cost of any laboratory and X-ray studies.

Professional Liability: Professional students are required to purchase on a yearly basis professional liability insurance through a university endorsed company.

ACADEMIC PROGRESSION

All entry-level Physical Therapy program requirements must be completed in 33 months unless permission is otherwise granted by the director of the Physical Therapy program. The academic progress of students in the Physical Therapy program is evaluated at the end of each semester. Progression standards are subject to change based on regulatory, licensing, and/or certification needs. Satisfactory progress is contingent upon satisfying the following academic requirements:

- 1) A grade of C or better is required in all physical therapy courses. A letter grade of D, F or U in physical therapy courses requires the student to repeat the course before progressing to subsequent courses for which the failed course is a prerequisite. When repeating a physical therapy course, a student may be required to successfully complete ancillary learning experiences or clinical competencies/practicums that validate theoretical knowledge. If a student is unable to take further courses in the next occurring semester as a result of this policy, the student is placed on academic suspension and repeats the course during the next appropriate semester. A course may be repeated only one time. A student receiving a D, F or U in the same physical therapy course twice or in two physical therapy courses is dismissed from the program.
- 2) A student must obtain a grade point average of 3.00 or better each semester. If a student earns a semester grade point average between 2.00 to 2.99, he/she is placed on academic probation. To meet academic standards for progression, the student must earn a grade point average of 3.00 or better in the following semester. If a clinical internship course is scheduled during the next semester, the student must earn a satisfactory (S) grade in the clinical internship course and a semester grade point average of 3.00 or better in the semester following the clinical internship to be removed from academic probation. If a student is on academic probation the last semester of the program, the student must earn a grade of S in the clinical internship and PTH 612: Clinical Research II to graduate. If a student is placed on academic probation a second time during his or her tenure in the program, he or she will be dismissed from the program. If a student fails to meet the criteria for removal from academic probation, he/she will be dismissed from the program. If a student earns a semester grade point average of 1.99 or less, he/she will be dismissed from the program.

ENTRY-LEVEL PHYSICAL THERAPY PROGRAM

POLICY ON REAPPLICATION TO THE PROGRAM

The policy on reapplication defines the process by which students may seek readmission to the program following dismissal of the student from the program for failing to maintain good academic standing. Readmission candidates may apply for readmission to the program no sooner than one year and no later than three years from the date of dismissal. Readmission candidates may exercise their reapplication option only once. Readmission candidates applying to the program must submit the materials required of all applicants for admission. In addition, they must provide transcripts relating to any education experiences completed since leaving the program. A letter indicating why the readmission candidate believes s/he will succeed academically and technically in the program must accompany the application materials. Upon review of the materials, the program's admissions selection committee may render the following decisions: 1) Approval of the request for readmission to the program with the academic condition that the readmission applicant repeat the entire academic program or 2) denial of the request for readmission to the program.

CLINICAL EDUCATION

Clinical education in the physical therapy program consists of patient experiences in courses, integrated teaching laboratory practice courses, and 35 weeks of full-time supervised clinical internship courses. Clinical education experiences occur off campus, and thus a student must secure appropriate transportation.

Learning experiences involving clients begin in the classroom through course experiences both at the University and at clinical practice settings where students observe and have planned practical experiences. The classroom experiences are expanded into a series of three integrated teaching laboratory practice courses where students participate in campus-community service learning wellness and prevention initiatives with healthy individuals and individuals with pathology and disability across the life span. In addition, students participate in five seven-week full-time (40 hours/week) internships with patients/clients in a variety of environments that include rural, inpatient, outpatient, and specialty facilities and that are representative of contemporary physical therapy practice and patient/client differences.

FEES AND FINANCIAL AID

During the Professional Phase I of the Physical Therapy Program, tuition and other fees apply to all students. A professional program fee of \$275 per semester is assessed for course related supplies and equipment, liability insurance, and assistance with membership dues in the American Physical Therapy Association (APTA). Carroll University students in their senior year are eligible for undergraduate financial aid. Students who have previously earned a bachelor's degree are eligible for undergraduate Federal Subsidized Stafford/Unsubsidized Stafford Loans.

Graduate (Phase II) tuition is \$645 per credit, and students enrolled in Phase II are not eligible for Carroll University financial aid grants. Students in Phase II are eligible for graduate Unsubsidized Stafford Loans. Information regarding any clinical facility scholarships and how to make applications for them is available.

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LICENSURE

Students are responsible for determining the requirements of and securing the application from the state in which they expect to be licensed.

ENTRY-LEVEL DOCTOR OF PHYSICAL THERAPY PROGRAM CURRICULUM: 122 Credits

Phase I

(Senior year for Direct Admit and Transfer Students) 32 credits

Fall Semester — 16 credits

PTH 400, Foundations of Professional Practice

PTH 404, Biomechanics I

PTH 406, Applied Exercise Physiology I

PTH 407, Human Learning and Behavior

Spring Semester — 16 credits

PTH 401, Clinical Research I

PTH 405, Neuroscience

PTH 414, Biomechanics II

PTH 416, Applied Exercise Physiology II

Phase II

Year 1 — 44 credits

Summer Semester — 13 credits

PTH 500, Applied Physiology II (3 credits)

PTH 501, Basic Patient Management Skills (3 credits)

PTH 520, Professional Practice I (2 credits)

PTH 521, Physical Therapy Teaching Laboratory Practicum I (2 credits)

PTH 540, Clinical Decision Making Seminar I (2 credits)

PTH 550, Readings and Research I (1 credit)

Fall Semester — 15 credits

PTH 560, Pathology (Initial 7 weeks) (3 credits)

PTH 509, Introduction to Clinical Pharmacology (Initial 7 Weeks) (3 credits)

PTH 541, Clinical Decision Making Seminar II (Initial 7 Weeks) (2 credits)

PTH 515, Clinical Internship I (Final 7 Weeks) (7 credits)

Spring Semester — 16 credits

PTH 506, Neurological System Disorders I (3 credits)

PTH 507, Musculoskeletal System Disorders I (3 credits)

PTH 508, General Medicine I (3 credits)

PTH 530, Professional Practice II (2 credits)

PTH 531, Physical Therapy Teaching Laboratory Practicum II (2 credits)

PTH 542, Clinical Decision Making Seminar III (2 credits)

PTH 551, Readings and Research II (1 credit)

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Year 2 — 46 credits

Summer Semester — 14 credits

PTH 611, Clinical Internship II (14 weeks) (14 credits)

Fall Semester — 15 credits

PTH 606, Neurological System Disorders II (3 credits)

PTH 607, Musculoskeletal System Disorders II (3 credits)

PTH 608, General Medicine II (3 credits)

PTH 640, Clinical Decision Making Seminar IV (1 credit)

PTH 620, Professional Practice III (2 credits)

PTH 621, Physical Therapy Teaching Laboratory Practicum III (2 credits)

PTH 650, Readings and Research III (1 credit)

Winter/January Term – 1 credit

PTH 641Clinical Decision Making Seminar V (2 weeks)

Spring Semester – 16 credits

PTH 612.....Clinical Research II (2 credits)

PTH 614Clinical Internship III (14 weeks, 14 credits)

Summary of Credits

Doctor of Physical Therapy Degree.....	122 credits
Phase I.....	32 credits
Phase II.....	90 credits

PTH 400. Foundations of Professional Practice 4 credits

Fundamental concepts related to professionalism and the roles and responsibilities of the physical therapist are introduced. Emphasis is placed on professional practice expectations (communication, diversity, professional behavior, critical inquiry and clinical decision making, education, and professional development) and practice management expectations (prevention/wellness/health promotion, management of health care delivery administration, consultation, and social responsibilities). The health care delivery system including cost, quality, and access and the policies and legislation which drive these forces are introduced. The vital roles physical therapists contribute to the overall health care delivery system are introduced. (*Fa*) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 401. Clinical Research I 4 credits

The concepts of critical inquiry and reflective thinking in physical therapy are introduced. The components and processes of qualitative and quantitative research in physical therapy are emphasized. Students access and analyze a variety of health care and physical therapy literature. (*Sp*) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 404. Biomechanics I 4 credits

Biomechanics I is the first of a two-course sequence investigating the anatomical and mechanical bases of normal human movement. Musculoskeletal structure and function as they relate to the production of normal human movement are explored using a vari-

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ety of kinematic and kinetic analysis techniques. (*Fa*) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 405. Neuroscience

4 credits

The structure, chemistry, and functioning of the brain in relation to learning, memory, emotion, personality, and complex human behaviors, including thought and language, are emphasized. Brain disorders are discussed. Resources used to study the structure, chemistry, and function of the human brain include laboratories and CD ROM programs. (*Fa*) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 406. Applied Exercise Physiology I

4 credits

The fundamental principles of exercise physiology are explored. The anatomical, physiological, biochemical, and psychological effects of exercise in healthy untrained and trained individuals are studied. The effects of exercise on the human body are discussed across gender, race, and life span. Exercise performance under different environmental conditions is also presented. Cardiovascular endurance and skeletal muscle force generating assessment and training techniques are performed. Resources used to study the effects of exercise on the human body include exercise physiology laboratories, computer simulations, and observations. (*Fa*) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 407. Human Learning and Behavior

4 credits

The basic principles of human learning and behavior are explored across gender, culture, and life span. Attention is focused on Pavlovian and instrumental conditioning and their applications in medicine and education; the concepts of motor learning and their application in skill learning and recovery of function; information-processing approaches to behavior; and behavior dysfunction. Basic research is related to applied efforts in educational technologies and behavior modification. (*Sp*) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 414. Biomechanics II

4 credits

Biomechanics II is the second of a two-course sequence investigating the anatomical and mechanical bases of normal human movement. In this course, quantitative analysis is emphasized to integrate and apply previous biomechanical and kinesiological knowledge. Advanced technologies are introduced and applied to examine kinematic and kinetic principles introduced in both Biomechanics I and II. Students apply course material to design a research project and proceed through data collection and analysis, culminating with presentation. (*Sp*) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 416. Applied Exercise Physiology II

This course is the second in a sequence of two exercise physiology courses where the investigation of fundamental exercise physiology principles are advanced. This course focuses on the acquisition of more complex exercise physiology concepts and their application as well as integration and critical analysis of fundamental exercise physiology content, acquired previously. The effects of exercise, decreased use, exercise testing and exercise prescription are explored and applied to individuals of varying gender, age and across the life span. The role of exercise in wellness and primary prevention programs is addressed. (*Sp*) Prerequisites: Entry-Level Physical Therapy Program Standing.

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PTH 500. Applied Physiology II

3 credits

The underlying physical and physiological principles of massage, cryotherapy, heat, water, light, sound, and electrical current applications are presented. The application and physiological effects of massage, cryotherapy, heat, water, light, sound, and electrical current in peripheral inflammation across gender, race, and the life span are studied. The Patient/Client Management Model and the Guide to Physical Therapy Practice are utilized in the application of massage, cryotherapy, heat, water, light, sound, and electrical current. Best care outcomes, respectful of patient/client values and grounded in evidence based practice and clinical reasoning, in the application of massage, cryotherapy, heat, water, light, sound, and electrical current are emphasized. Content mastered in this course will be applied in subsequent courses in the physical therapy program. (Su) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 501. Basic Patient Management Skills

3 credits

This course introduces and fosters the development of the knowledge, values, and skills germane to the profession of physical therapy to first year student physical therapists. Standard safety procedures, communication skills, fundamental examination procedures, and treatment interventions focusing on mobility and exercise are introduced and integrated into the patient-client management model and applied through clinical simulations that incorporate clinical reasoning, patient/family education, and evidence-based practice principles to provide a foundation best practice. Previous and concurrent course work is applied with an emphasis on basic investigation of abnormal motion and its underlying pathophysiological and pathokinesiological impairments/contributing factors leading to functional limitation and disability. (Su) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 506. Neurological System Disorders I

3 credits

Current and emerging conceptual frameworks and approaches for assessing and retraining movement in individuals with movement disorders are analyzed in the first semester of this two semester course sequence. Normal and abnormal postural control and movement disorders will be analyzed across gender, culture and the life span. Instruments, tests, screens, and evaluations to detect neurological impairments and functional limitations, and therapeutic interventions used in the treatment of patients with neurological impairments are investigated. Students must also apply basic knowledge and patient management skills developed during Phase 1 of the Entry-Level Graduate Program in Physical Therapy in the screening, evaluation, and treatment of individuals with neurological disorders. Utilization of clinical cases and technology in the presentation of the subject matter develop students' problem solving abilities. Management of specific central and peripheral nervous system pathology, including diagnosis, clinical manifestations, clinical course, and prognosis of neurological disorders will be explored in the second semester (PTH 606). (Sp) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 507. Musculoskeletal System Disorders I

3 credits

PTH 507 is the first of a two-course sequence that explores the examination, evaluation, diagnosis, prognosis, interventions, and outcomes for patients with musculoskeletal disorders. Prior knowledge and skills are integrated with a standardized musculoskeletal examination scheme that is introduced and applied through a regional approach beginning in the lower extremity and progressing proximally through the spine and upper

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extremities. Evidence based practice is emphasized. (*Sp*) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 508. General Medicine I

3 credits

General Medicine I is the first course in a two semester sequence that applies the patient client management model to patients with medical or surgical conditions, specifically those which involve vascular, cardiac, pulmonary, and acute orthopedic disorders, in the acute and rehabilitation environments. A systems approach is taken to present physiological function and dysfunction from the acute to chronic disease state. The focus of the course is the pathology/disease process, typical manifestations, effects on patient function, and medical and physical therapy management. Clinical decision making skills utilize evidence based practice, and account for psychosocial, cultural, and cognitive aspects of patient care. (*Sp*) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 509. Introduction to Clinical Pharmacology

3 credits

The concepts and principles essential to understanding the mechanisms underlying the physiologic effects of medications are explored in this course. (*Fa*) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 515. Clinical Internship I

7 credits

Students participate in a full-time internship for seven weeks at clinical facilities affiliated with the Physical Therapy Program. During the internship, a student's ability to utilize knowledge and employ skills developed during Phase I and Phase II, Year 1 Summer and Fall Semesters of the Physical Therapy Program is assessed. *S/U* Grading. (*Fa*) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 520. Professional Practice I

2 credits

Professional practice expectations and practice management expectation concepts are broadened and applied to apparently healthy children and adults. Primary emphasis includes emerging specialty practice settings for physical therapists working with healthy populations, as well as communication and educational needs across the life span. This course examines the administration, management and regulations surrounding various practice settings including (but not limited to) parks and recreation departments, wellness facilities (health clubs, YMCA, etc), children's organizations (girl scouts) and governmental organizations (city fire departments). Students draw upon experiences from PTH 521: Teaching Laboratory Practice I to enhance professional practice and management expectation concepts as well as apply the scientific inquiry process to practice issues. (*Su*) Prerequisite: Entry-Level Physical Therapy Program Standing.

PTH 521. Physical Therapy Teaching Laboratory Practicum I

2 credits

Consistent with the Physical Therapy Program and TLP philosophies, curricular philosophy, and Program goals and objectives, PTH 521 provides students with a wide range of opportunities to further develop practice-based, hands-on skills and experiences in a context of primary wellness and prevention across the life span under the direct supervision of Division of Natural and Health Sciences faculty. Specific service-learning opportunities take place on and off campus and include performing wellness and prevention screenings, leading a motor skill development camp, delivering well-

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ness massage, participating in a caregiver conference, experiencing a biomedical technology laboratory, working as support staff for the TLP, and participating in grand rounds. (Su) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 530. Professional Practice II

2 credits

The concepts of professional practice and practice management expectations are applied to older adults. Issues unique to the older adult population such as identification of health care needs and the impact of health care policy on the care of older adults are explored. An emphasis on Medicare regulations, documentation, and reimbursement issues are examined in depth. Consultation and agencies appropriate to the older adult are identified. Service learning, volunteer and pro bono experiences are provided concurrently in PTH 531: Teaching Laboratory Practice II to enhance and provide a greater understanding of the content. Students analyze literature aimed at promoting evidenced based practice incorporating the economic, legal, and social issues surrounding physical therapy. (Sp) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 531. Physical Therapy Teaching Laboratory Practicum II

2 credits

Consistent with the Mission Statement, Curricular Philosophy, Goals and Objectives of the Carroll University entry-level Physical Therapy Program, PTH 531 expands on the foundation from PTH 521 to provide students with a wide range of opportunities to further develop, apply and integrate cognitive, psychomotor and professional-social skills in primary wellness and prevention across the life span with a focus on the healthy senior. An experiential, service learning model is used to provide opportunities in several environments that involve aspects of wellness and prevention. All practical experiences occur under the supervision of Program faculty and parallel didactic course work. (Sp) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 540. Clinical Decision Making Seminar I

2 credits

This is the first in a series of five clinical decision making courses that integrates professional practice, patient/client management, and practice management expectations using a case-based format, organized in a manner consistent with the *Guide to Physical Therapist Practice*, and emphasizing critical inquiry and reflective thinking. Clinical Decision Making I integrates the patient/client management model with prior knowledge and concurrent course content using patient problems comprised of impairments and functional limitations. (Su) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 541. Clinical Decision Making Seminar II

2 credits

This is the second in a series of five clinical decision making courses that integrates professional practice, patient/client management, and practice management expectations using a case-based format, organized in a manner consistent with the *Guide to Physical Therapist Practice*, and emphasizes critical inquiry and reflective practice. In Clinical Decision Making II, concepts are advanced using more complex patient cases as a progression from Clinical Decision Making I. The patient/client model is progressed by incorporating 1) contributions of underlying single-system pathology in patient management, 2) introduction of pertinent tests and measures from disciplines other than physical therapy, and 3) diagnosis, prognosis, outcomes, and disability. (Fa) Prerequisites: Entry-level Physical Therapy Program Standing.

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PTH 542. Clinical Decision Making Seminar III

2 credits

This is the third in a series of five clinical decision making courses that integrates professional practice, patient/client management, and practice management expectations using a case-based format, organized in a manner consistent with the *Guide to Physical Therapist Practice*, and emphasizes critical inquiry and reflective practice. In Clinical Decision Making III, the patient/client model is further advanced through 1) analysis and application of special tests beyond foundational examination tools, 2) the use of patient cases that involve multiple diagnoses, 3) integration of pertinent tests and measures from disciplines other than physical therapy, 4) identification, analysis, and application of indicators for referral to other practitioners, and 5) critical analysis of outcome measures. (Sp) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 550. Readings and Research I

1 credit

This course is the first in a series of three, one-credit courses that introduces the student to the research process under the guidance of a faculty member associated with the physical therapy program and gives the student the opportunity to apply theoretical information learned in PTH 401. This course introduces the student to the specific area of research by that particular faculty member. The faculty member presents foundational theoretical content specific to his or her area of research to facilitate student comprehension, analysis and participation. The students will investigate the research methodology and the statistical analyses related to the specific research topic. (Su) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 551. Readings and Research II

1 credit

This course is the second in a series of three, one-credit courses that introduces the student to the research process under the guidance of a faculty member associated with the physical therapy program and gives the student the opportunity to apply theoretical information learned in PTH 401. This course provides the student with an opportunity to participate in planning and implementing research methodology that results in data collection under the guidance of a faculty advisor. The student advances along the research process by analyzing and summarizing the data based upon work in the previous semester. (Sp) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 560. Pathology

3 credits

This course presents the foundational pathology, diagnosis, clinical course and management of various pathologic conditions most relevant to physical therapy practice. A systems approach is used to emphasize the etiology, pathogenesis, pathophysiology, medical evaluation and differential diagnosis, of diseases across the life span. Content will also include imaging and laboratory tests, and prognosis of patient conditions. Students will apply basic anatomy, physiology, physical therapy examination and intervention knowledge gained previously and pharmacology content they will be learning concurrently to acquire an appropriate perspective on patient/client management for people who present with disease/pathology of body systems. (Fa) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 606. Neurological System Disorders II

3 credits

The pathology, diagnosis, clinical manifestations, clinical course, and prognosis of neurological disorders are explored. Current and emerging conceptual frameworks and approaches for retraining movement in individuals with neurological impairments are

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analyzed. Instruments, tests, screens, and evaluations to detect neurological impairments and functional limitations, and therapeutic interventions used in the treatment of neurological impairments are investigated. Students must also apply basic knowledge and patient management skills developed during Phase 1 of the Entry-Level Graduate Program in Physical Therapy in the screening, evaluation, and treatment of individuals with neurological disorders. Utilization of clinical cases and technology in the presentation of the subject matter develop students' problem solving abilities. (Fa) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 607. Musculoskeletal System Disorders II

3 credits

This course explores the examination, evaluation, diagnosis, prognosis, and interventions for patients with musculoskeletal disorders across the life span, including amputation. Prior knowledge and skills are integrated with a standardized musculoskeletal examination scheme that is introduced and applied through a regional approach. Musculoskeletal pathology including medical management, industrial medicine, and issues in contemporary practice are integrated. Evidence based autonomous practice is emphasized. (Fa) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 608. General Medicine II

3 credits

General Medicine II is the second course of a two semester sequence that covers evaluation, assessment, and treatment interventions in acute and rehabilitation environments for patients with endocrine, gastro-intestinal, integumentary, hepatic, renal, and gynecological disorders. The role of physical therapy in transplants, oncology, incontinence, obstetrics and dementia is also covered. The common pathology, evaluation and treatment of the pediatric client will also be studied. Psychosocial considerations, cultural differences and cognitive function and reaction of patients with acute and chronic conditions will be covered. Specific evaluation and treatment interventions with respect to prosthetics and orthotics will be discussed. The course structure is based on a review of pertinent physiological system, common pathology and comprehensive treatment of the involved patient. Instruments, tests, screens, and evaluations to detect impairments, functional limitations, disability and disease, and therapeutic interventions used in the treatment of the diseases are investigated. (Fa) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 611. Clinical Internship II

14 credits

Students participate in full-time internships for fourteen weeks at clinical facilities affiliated with the university's Physical Therapy Program. During the internship, a student's ability to utilize knowledge and employ skills developed during Phase I and II of the university's Entry-Level Graduate Program in Physical Therapy is assessed. (Su) (S/U grades) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 612. Clinical Research II

2 credits

Using a case report format, students describe evidence-based, autonomous practice using a patient identified during Clinical Internship III with neurological, musculoskeletal, cardiopulmonary, integumentary, endocrine, or infectious diseases. The case report is presented in written and oral format to the Entry-level Physical Therapy program faculty and students during the final week of spring semester. Peer and faculty review and evaluation of the written and oral reports is incorporated into the course grade. The case report must be appropriate to submit for presentation at a national pro-

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professional conference. (Sp) Prerequisites: Entry-level Doctor of Physical Therapy Program standing.

PTH 614. Clinical Internship III

14 credits

Students participate in the fourteen week, full-time terminal internship at clinical facilities affiliated with the Physical Therapy Program. During the internship, a student's ability to apply and integrate the knowledge and skills consistent with best care and autonomous practice that have been developed during Phase I and II of the Program is documented and assessed. (Sp) Prerequisites: Entry-level Doctor of Physical Therapy Program standing.

PTH 620. Professional Practice III

2 credits

The concepts of professional practice expectations and practice management expectations are applied across the life span to special populations that have pathology. Issues unique to these populations include the current and future care needs of the patient, family and caregiver. The role of the PT in various practice settings including hospice, school systems, and home health agencies is examined. Critical review of current events and literature to provide evidence of clinical practice is required. The impact of health care policy, reimbursement and documentation with special emphasis on Medicaid for children and older adults is explored. The role of physical therapy beyond intervention is also explored in depth and includes administration and management of facilities as well as the legal responsibilities related to management and administration. Students have the opportunity to draw on experiences from concurrent PTH 621. (Fa) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 621. Physical Therapy Teaching Laboratory Practicum III

2 credits

Consistent with the Mission Statement, Curricular Philosophy, Goals and Objectives of the Carroll University Entry-level Master of Physical Therapy Program, Physical Therapy Teaching Practicum III (PTH 621, the third of a series of three practicum courses) provides students with the practice-based, hands-on skills and experiences which parallel didactic instruction during the semester. These skills and experiences include secondary wellness and prevention screenings in the diseased and disabled and elderly under supervision of a licensed physical therapist faculty member, and participation at disabled children camps, home visits with an interdisciplinary health team, and specific practical experiences off campus. S/U Grading. (Fa) Prerequisites: Entry-Level Physical Therapy Program Standing.

PTH 640. Clinical Decision Making Seminar IV

1 credit

This is the fourth course in the clinical decision making series that integrates professional practice, patient/client management, and practice management expectations using a case-based format, organized in a manner consistent with the *Guide to Physical Therapist Practice*, and emphasizes critical inquiry and reflective practice. In Clinical Decision Making IV, students perform a comprehensive review of an authentic clinical case. Patient management, utilization of resources, and coordination of services are critically evaluated. Based upon critical analysis of research evidence, utilization of services, and legal and ethical practice issues, students provide support for the care provided by the treating practitioner and propose a plan of potential options. The review is presented to academic and clinical faculty in written format and defended orally. (Sp) Prerequisites: Entry-level Physical Therapy Program Standing.

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PTH 641. Clinical Decision Making Seminar V

1 credit

This is the final of the five courses that comprise the clinical decision making series in which professional practice, patient/client management, and practice management expectations are integrated using a case-based format organized in a manner consistent with the *Guide to Physical Therapist Practice*, and emphasizes critical inquiry and reflective practice. In Clinical Decision Making V, principles and techniques are presented that prepare students for designing and writing an independent case report that is completed in PTH 612. Additionally, students are required to procure the policies, procedures and documents necessary for attaining institutional approval for their individual case reports and complete related documentation to the greatest extent possible. Prior knowledge related to the use of case reports in the medical field and physical therapy is advanced through critical analysis and presentation of published case reports. *S/U* Grading. (*Wn*) Prerequisites: Entry-level Physical Therapy Program Standing.

PTH 650. Readings and Research III

1 credit

This course is the third in a series of three, one-credit courses that introduces the student to the research process under the guidance of a faculty member associated with the physical therapy program and gives the student the opportunity to apply theoretical information learned in PTH 401. This course offers the student the opportunity to investigate different options for disseminating scholarly information including, but not limited to: abstract, poster presentation, platform presentation and submission of a proposal or manuscript. Based upon the research topic and faculty recommendation the student will prepare the research project in some format appropriate for peer review. (*Fa*) Prerequisites: Entry-level Physical Therapy Program Standing.

MASTER OF SOFTWARE ENGINEERING AND GRADUATE CERTIFICATE IN SOFTWARE ENGINEERING

Chenglie Hu

Gerald L. Isaacs

Michael G. Konemann

Professor and Director, Master of Software Engineering

Professor

Associate Professor

Carroll University offers a master's degree and a graduate certificate program in software engineering. These programs are based on the assumption that professionals must remain current within the rapidly changing environment of information technology. The program uses real-world business projects and scenarios to educate professionals in the latest software development methodologies and practices.

The current coursework is based on these subject areas:

- Advanced Programming Skills
- Software Engineering Methodologies and Techniques
- Object Oriented Design and Implementation
- Relational and Object Oriented Database Models and Implementation
- Network and Client/Server Technologies and Techniques
- J2EE and .NET Frameworks
- Software Project and Team Management
- Advanced software engineering knowledge areas

The software engineering program provides a graduate education that deepens and broadens the student's expertise, technical and management skills, and industry understanding. It maintains a balance between abstract, theoretical insights and their application. The program is faithful to the mission of Carroll University, which focuses on life-long learning, career preparation, and education for productive and meaningful lives.

All courses in the curriculum are based in current software development trend and technology but look towards the future. A particular technology is of value only if it is used as a tool for solving a current workplace related problem. Since future developments will soon make current solutions obsolete, the curriculum must provide experience and develop a knowledge base that will facilitate continuous learning. Upon completion of the Master of Software Engineering program, graduates are able to:

1. Apply sound software engineering principles and methodologies in any software development process regardless of roles they may play as software developers, development leads, or software project managers.

SOFTWARE ENGINEERING MASTERS/CERTIFICATE

2. Problem-solve (mostly for business problems) at a higher level using enterprise resources, major Web software development frameworks, and sound software design methodologies.
3. Be competitive in making sound judgment on any IT issues that are related to software development.
4. Meet challenges of a software development process as information technologies advance.
5. Be self-motivated and highly effective players in any team environment.

COURSE OF STUDY

Master of Software Engineering

The Master of Software Engineering (MSE) is a 36-credit program, which is based on a model that emphasizes object-orientation, multi-tier data-driven development, and sound software engineering and design methodologies. The program has been approved by the Higher Education Learning Commission (HLC)/North Central Association. The 36 credits consist of the following 12 three-credit courses:

Computer Science 506, Object Oriented Programming and Data Structures
Computer Science 550, Advanced Web Applications
Computer Science 560, Advanced Web Applications II
Computer Science 591, Enterprise Data Modeling
Computer Science 600, Object Oriented Analysis and Design
Computer Science 602, Software Project Management
Computer Science 603, Networking: Design and Implementation
Computer Science 640, Software Engineering
Computer Science 643, Advanced Topics in Software Engineering
Computer Science graduate elective
Computer Science 650, Capstone I
Computer Science 651, Capstone II

Graduate Certificate in Software Engineering

Students must have a Bachelor's degree to be enrolled in the Graduate Certificate Program. Students must successfully complete any five three-credit classes offered in the program to complete the certificate. Students usually take Computer Science 506, 550, 560, 591, and 640. Students must earn C or better in each of the courses to be counted towards the certificate. Only courses with grade B or better can be credited towards the Master of Software Engineering degree if the students is later admitted to the MSE degree program.

SCHEDULING

Several different courses will be offered fall, spring, and summer semesters. Since the program is specifically oriented toward working professionals, classes may be offered in a hybrid format, that is, courses will meet periodically in a synchronous in-class mode with additional asynchronous components, as well as online format (noted at end of course description as WW). By taking only one class each semester, students

SOFTWARE ENGINEERING MASTERS/CERTIFICATE

may earn the graduate certificate in less than two years. Students may elect to complete two courses a semester and earn the certificate in less than one year.

ADMISSION

Requirements for admission into the Master of Software Engineering program include the following:

1. Earned bachelor's degree with a cumulative GPA of 2.75 or higher
2. Completed Master of Software Engineering Admission Form
3. Official transcripts from all undergraduate institutions attended
4. Résumé that describes work experience, computer programming background, and professional interests
5. If the applicant's native language is not English and did not complete his/her undergraduate degree in an English speaking country, an official TOEFL or IELTS or MELAB score is required and sent directly from the testing agency. The minimum required TOEFL score is: 79 (Internet based test) or 213 (computer based test) or 550 (paper based test). The institution code for Carroll University is 1101. The minimum required IELTS score is: 6. The minimum MELAB score is: 85.
6. Letter of recommendation (professional reference preferred if the applicant has professional work experience)

Additional factors that may impact admission decisions:

1. Applicants, regardless of their undergraduate majors, must possess reasonable programming skills equivalent to those gained in a Data Structures course of a typical Computer Science program. In particular, descent Java language knowledge and programming skills are expected. When deemed necessary, students with no programming background or insufficient programming knowledge and skills may be required to take one or more undergraduate Computer Science courses at Carroll University.
2. If applicant's undergraduate major is not in a computing related field, having computing or information technology professional work experience (typically two years or more) will be viewed favorably in making admission decisions.

FEES

Tuition for graduate courses in software engineering is \$450 per credit.

COURSES

CSC 506. Object Oriented Programming and Data Structures **3 credits**

This course is an intensive introduction to the fundamentals of object-oriented programming. The features of the object-oriented paradigm (encapsulation, inheritance and polymorphism) will be introduced through use of the language Java. Fundamental data structures such as stacks, queues, lists and trees will be covered along with an analysis of algorithm efficiency. (*Fa*) Prerequisite: programming knowledge equivalent to an undergraduate data structures course or consent of the instructor.

CSC 550. Advanced Web Applications**3 credits**

This course concentrates on the skills necessary for a student to master the multi-tier Web development environment using Microsoft .NET framework (the latest version). Database-driven applications, Web services, and component development are stressed. Other topics covered may include SOA (Service Oriented Architecture), XML document processing, as well as performance and security issues. Web fundamentals are reviewed as deemed necessary. Prerequisite: knowledge of database programming or consent of the instructor.

CSC 560. Advanced Web Applications II**3 credits**

This course develops the skills necessary for a student to master the world of Java-based server-side processing. This course builds on CSC 550 with special emphasis on the Java2 Platform for implementing scalable and reliable enterprise applications from reusable components. Each student will manage a Tomcat-JBoss Web Server running on a dedicated Linux server for the entire semester. Contemporary issues in client server technology will be addressed including Remote Method Invocation (RMI), JavaBeans, Java Servlets, and Java Server Pages (JSP). A three-tiered distributed component programming environment is used with an Oracle Database on the third tier. (Sp) Prerequisites: knowledge of database programming and CSC 506.

**CSC 580. Information Technology Management in a
Net-Centric World****3 credits**

This course studies management of information technology and its transitions in a technology based world. The foundational message of the course is that the primary focus of the IT manager must be the business goals of the organization and the application of current and future technology towards a competitive advantage for the organization. Operational, tactical and strategic directions are discussed with the understanding that these are changing and will continue to change with the application of technology both within the organization, within their industry, and with respect to supply chain management. The positioning of the head of information technology within the organization is researched and discussed. Proven leadership goals and strategies within information technology departments are reviewed and discussed with the focus of reviewing how technology is changing the methods and focus of IT management.

CSC 591. Enterprise Data Modeling**3 credits**

The course concentrates on the concepts and skills necessary to design effective domain-object models, convert these models to relational models, and bridge the object-relational impedance mismatch. These skills include Domain-Object and Entity/Relationship (ER) Modeling, normalization, command of the SQL language, and object-relational mapping (ORM). Students will study both the theory and practical aspects of domain-driven design, enterprise relational databases, layered architectures and an object-relational mapping API. (Fa) Prerequisite: knowledge equivalent to an undergraduate database course or consent of the instructor.

CSC 600. Object Oriented Analysis and Design**3 credits**

This course concentrates on the object-oriented paradigm as it applies to analysis, design and software implementation. Various object-oriented design patterns will be

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introduced, as will design frameworks as they apply to the latest software development practices. Unified Modeling Language (UML) and CASE tools may be used as appropriate. (*Sp*) Prerequisite: CSC 506.

CSC 602. Software Project Management

3 credits

This course concentrates on the skills necessary to manage a software project both from the technical perspective and from the human relations perspective. By their very nature, software projects defy a "one size fits all" approach. In this course, students will learn to apply best-practice principles while maintaining the flexibility that's essential for successful software development. This course will stress the understanding of how and why software development must be planned on a certainty-to-uncertainty continuum, the categorization of your projects on a particular model, the learning of the SDPM strategies and their benefits, the reorganization of scoping, planning, launching, and monitoring/controlling activities, and the application of the knowledge to the specific projects you manage. (*Sp*)

CSC 603. Networking: Design and Implementation

3 credits

This course presents a view of the broad field of data communications and networking. Fiber and wireless technologies (Wireless LAN, MMDS, LMDS) will be stressed as they reshape the future of networking. Topics include network classification, protocols, services, hardware components: routers, switches, multiplexors, concentrators, and communications media. Students will concentrate on how technology is changing the nature and uses of networking as bandwidth and services increase under a Moore's Law projection. Quality of service issues will be stressed and uses of this technology are studied as it leads a reshaping of organizations and their activities. Broadband and last mile issues will be studied and forecast as these reshape communication. (*Su, WW*)

CSC 605. Mathematical Underpinnings of Information Systems

3 credits

This class will provide the mathematical underpinnings of the MSE curriculum. It will emphasize the mathematical structures used in computer and information sciences. Topics covered will include analysis of algorithms, mathematical logic, sets, graph theory, functions, relations, recursion, computability, proof of correctness, and applications.

CSC 610. Operating Systems

3 credits

This class covers the elements and design of operating systems. Traditional operating systems such as Unix and Windows will be compared and contrasted along with more futuristic, experimental operating systems. Problems such as concurrence, memory management, file management, communication, security and other such issues will be addressed. A "hands-on" laboratory component includes experiments with the linux kernel. Prerequisite: CSC 506.

621. Algorithms

3 credits

This course covers essential strategies of algorithm design and analysis, including top-down design, divide and conquer, average and worst-case criteria, and asymptotic costs. Recurrence relations for asymptotic costs and choice of appropriate data structures such as arrays, lists, stacks, queues, trees, heaps, priority queues, graphs, hash tables may also be covered. Applications to sorting and searching, graph algorithms,

matrix algorithms, shortest-path and spanning tree problems, and discrete optimization algorithms such as dynamic programming and greedy algorithms are also stressed. Prerequisite: CSC 506.

CSC 623. Programming Languages

3 credits

This class covers the elements and design of programming languages. Topics covered include: specification of syntax and semantics, programming language paradigms – with several example languages, and parsing. (*Sp, even years*) Prerequisite: CSC 506 or consent of the instructor.

CSC 631. Advanced Database Design and Implementation

3 credits

This course builds upon previous database experience. It assumes that the student is proficient with a Database Management System (DBMS) and adds the object model to the database model. Various DBMS systems will be explored, examined and compared. Research into this new model and its future will also be examined.

CSC 640. Software Engineering

3 credits

This course presents state-of-the art techniques in software development. Topics will include the software engineering lifecycle and current approaches to software development, including formal software specification, software teams, Web engineering, and agile development. In addition, the course will cover version control, roll out, software maintenance and quality assurance. Research issues in software engineering will be examined. (*Fa*) Prerequisite: CSC 600 or consent of the instructor.

CSC 641. Advanced Visual Basic

3 credits

This course is a hands-on examination of further features and techniques of the programming language Microsoft Visual Basic. This course provides further experience in OO programming and demonstrates how to build Windows applications using the features of Visual Basic. (*WW*)

CSC 642. Visual C++

3 credits

This course is a hands-on examination of the features and techniques of the programming language Microsoft Visual C++. This course provides further experience in OO programming and demonstrates how to build Windows applications using the features of Visual C++. (*WW*)

CSC 643. Advanced Topics in Software Engineering

3 credits

This course provides students with an understanding of some more focused and/or advanced software process methodologies, practices, and techniques, which may affect developing quality software systems as they evolve over time. This course also provides an environment for students to critically evaluate what they are exposed to, so that they are better prepared to make the right technical decisions when working on changing, large codebases. The actual topics to be covered in the course may vary from time to time depending upon the current software development trend and the advancement of the technology. The topics to be covered may include, but are not limited to, software metrics, software testing and quality engineering, requirement engineering, software maintenance and evolution, system architecture, advanced topics in software design, software compo-

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nents, advanced software validation and verification methods, configuration management, and formal methods. (*Sp*) Prerequisite: CSC 640 or consent of the instructor.

CSC 650. Capstone I

3 credits

For an approved real-world project that the student has selected, this course requires the amount of work equivalent to the first two phases of the Unified Software Process – the Inception and Elaboration phases. All five workflows should be represented – requirement, analysis, design, implementation, and testing, with emphasis on incremental development with short iterative production cycles. A working prototype or a partially finished product is expected. The latest software development methodologies should be adopted as deemed appropriate. (*WW*) Prerequisites: completion of CSC 550, CSC 560, CSC 591, CSC 600, CSC 640, and completion or concurrently taking CSC 602 and CSC 643.

CSC 651. Capstone II

3 credits

This course is normally the last course taken in the graduate program. The student is expected to use all of the skills developed with the other courses and life experiences. This course is a continuation of CSC 650 and the required amount of work is equivalent to the latter two phases of the Unified Software Process – Construction and Transition phases. Dealing with frequent changes has become the norm of modern software development, and the student is expected to demonstrate the ability to handle the changes incurred. A completely finished product is expected. (*WW*) Prerequisites: CSC 650.

CSC 660. Component Software and Implementation Issues

3 credits

This course requires the student to bring together the knowledge and skills from the previous object-oriented courses. The class begins with a review of the object-oriented paradigm and continues through the real world issues of software creation for a wide variety of customers with varying needs and issues. Does the OO paradigm lead to the creation of component-based systems as its proponents suggest? And if so, how do implementation, reusability, components, internationalization and other similar topics affect the delivery of software systems? Prerequisite: CSC 560.

CSC 680. Internship in Software Engineering

1-3 credits

This course entails professional work experience in software engineering under the supervision of faculty and industry personnel. Written report required. *S/U* graded. (*WW*)

CSC 691. Special Topics in Software Engineering

3 credits

Advanced research designed to permit individual students or groups of students to undertake special projects related to their educational interests and goals.

MASTER OF SOFTWARE ENGINEERING

FIVE-YEAR DUAL DEGREE PROGRAM

This program allows students to gain a solid computer science background and advanced professional software development skills on an accelerated pace and be ready for the challenges of the information technology industry upon graduation. The program allows students to be able to still finish a Bachelor of Science degree in four years or fewer should they choose not to continue with the five-year program.

ADMISSION REQUIREMENT

Students must major in Computer Science with emphasis in either Software Engineering or ABET-Suggested Curriculum to be eligible for this five-year program. Students may be admitted to the five-year BS-MSE dual degree program as freshmen. However, a combination of a GPA of 3.0 or higher in the major and an overall GPA of 2.75 or higher is required to remain in the five-year program. Alternatively, a student with a GPA of 3.0 or higher in the major and overall GPA of 2.75 or higher may be admitted to the five-year degree program any time before 80 undergraduate credit hours are completed. The latest that a student can apply for admission is during the second semester of his or her junior year.

Sample Course Completion Schedule for CS/SE Emphasis

	Fall		Spring		Winter/Summer
Year 1	CCS 100 4 CSC 110 4 MAT 160 4 GE 1 4 CSC 107* 2		ENG 170 4 CSC 111 4 MAT 161 4 CSC 211 4 CSC 109* 2		
Year 2	CSC 226 4 COM 101 (GE 1) 4 GE 1 4 Elective 4		CSC 323 (odd yrs) or CSC 271 & 272 (even yrs) 4 MAT 205 4 GE 1 4 Elective 4		
Year 3	CSC 351 4 Elective 4 GE 2 4 GE 1 4		CSC 323 (odd yrs) or CSC 271 & 272 (even yrs) 4 CSC 341 4 CCE 2 CCS 400 2 CSC 480* 4		Cross-Cultural Experience 2
Year 4	CSC 440/640 4 CSC 506 3 Elective 4 Elective 4		CSC 560 3 CSC 600 3 Global Colloquium 2 CSC 450 * 4		CSC 680 6 CSC 603 3
Year 5	CSC 591 3 CSC 550 3 MSE elective 3		CSC 650 3 CSC 602 3 CSC 643 3		CSC 651 3 MSE elective 3

Note: Courses with an asterisk may be taken during winter and/or summer sessions.

Sample Course Completion Schedule for CS/ABET-Suggested Curriculum Emphasis

	Fall		Spring		Winter/Summer	
Year 1	CCS 100	4	ENG 170	4		
	GE 1	4	CSC 111	4		
	MAT 160	4	MAT 161	4		
	GE 1	4	GE 1	4		
Year 2	CSC 226	4	CSC 323 (odd yrs) or			
	COM 101 (GE 1)	4	CSC 271 & 272 (even yrs)	4		
	GE 1	4	MAT 205	4		
	MAT 207	4	Elective	4		
			CSC Elective	4		
Year 3	MAT 312	4	CSC 323 (odd yrs) or		Cross-Cultural	
	CSC Elective	4	CSC 271 & 272 (even yrs)	4	Experience	2
	CSC Elective	4	CSC 341	4		
	GE 2	4	CSC 421	4		
			CSC 480*	4		
Year 4	CSC 440/640	4	CSC 560	3	CSC 680	6
	CSC 506	3	CSC 600	3	CSC 603	3
	CSC Elective	4	Global Colloquium	2		
	CSC Elective	4	CSC 450 *	4		
Year 5	CSC 591	3	CSC 650	3	CSC 651	3
	CSC 550	3	CSC 602	3		
	MSE elective	3	CSC 643	3		

Note: (1) Courses with an asterisk may be taken during winter and/or summer sessions. (2) Despite the provided sample schedules, five-year program students always should consult with their advisors for possible modifications based upon their individual situations.

ADMISSION

Admission to Carroll University is offered to those for whom academic and personal success seems likely. Each candidate is evaluated individually. Evidence of good character and demonstrated ability to do graduate-level work is essential.

PROCEDURES FOR GRADUATE ADMISSION

Applicants submit a Carroll University Graduate Studies Application. Applications and credentials for admission to the graduate programs must be submitted for processing to the Carroll University Office of Admission located in Voorhees Hall.

Specific acceptance policies may be established by individual graduate programs. See specific graduate program.

General requirements for admission into any advanced graduate program at Carroll University include the following criteria:

1. An undergraduate degree in the professional field or a field related to the applicant's profession. Applicants could be required to take prerequisite courses before being accepted into a graduate program to ensure a base of knowledge in the area in which they wish to pursue graduate work.
2. Official transcript or listing of undergraduate and other graduate or continuing education work and grades, where appropriate.
3. A minimum undergraduate grade point average of 2.5. An individual program has the option of setting a higher minimum grade point average; see specific graduate program area. Some programs may allow an applicant to take up to 9 credits as a non-degree graduate student prior to being formally admitted to the graduate program.
4. Standardized test(s) when appropriate to the field of study.
5. Additional written materials as required by an individual graduate program.
6. An application fee may be required.
7. A technical standards form and/or a Department of Justice background check may be required for certain graduate programs.
8. In some graduate programs, students are required to have medical insurance coverage. See specific graduate program.

Acceptance decisions are made on applications when they are complete. In some instances, the files of prospective students are referred to a program's Graduate Admission Committee for review and action. That body may grant admission to the University provided certain conditions are met or may require the student to satisfy specified criteria.

University applicants with disabilities bear no obligation to disclose their disabilities during the application process. However, an applicant may choose to disclose his/her disability to the Office of Admission if the student believes that he/she does not meet the University's regular admission requirements. The disability may be taken into con-

sideration in relationship to the student's overall achievement, the effect of the disability on his/her academic achievement, and the likelihood of the student's success in the university's programs, courses and activities.

ENTRY-LEVEL DOCTOR OF PHYSICAL THERAPY PROGRAM ADMISSION

The entry-level Doctor of Physical Therapy Program admits qualified students regardless of race, color, creed, gender, age, sexual orientation, national or ethnic origin, or disability that does not interfere with the performance of professional physical therapy practice as provided by law.

An individual who has completed an undergraduate or graduate degree can apply for the professional phase of the program. Applications and credentials for admission to the physical therapy program must be submitted for processing to the Carroll University Office of Admission. As decisions are made on applications, applicants are notified through the Office of Admission. Applicants must be eligible to return in good standing (be free of academic or disciplinary probation) to all institutions previously attended. Applicants completing a bachelor's degree at Carroll University receive a calculated preference in consideration for Phase 1 admission to the program.

Selection decisions will be based on evaluation of the following:

- a. The Application for Admission to the Entry-Level Doctor of Physical Therapy Program Professional Phase which includes:
 1. Participation in a minimum of three clinical observation experiences from three different types of practice environments (e.g. inpatient acute care, outpatient orthopedic or neurological, skilled nursing facility, pediatric, etc. A Clinical Experience Documentation Form must be submitted to the program. A minimum of eight hours at each type of the three environments for a total minimum of 24 hours is required
 2. Three letters of reference: one from a physical therapist, one from a university professor, and one that attests to the student's character
 3. Essay question(s)
 4. Course Work in Progress Form
 5. Participation in university or community service activities
 6. The Safety and Technical Standards Form
- b. A university cumulative grade point average of 3.0 on a 4.0 scale is required to make application to the program.
- c. A pre-professional course grade point average of 3.0 or higher. Courses include:
 1. 4 semesters of Biology, including BIO 402 and 403
 2. 2 semesters of Chemistry, either CHE101/102 or CHE109/110
 3. 2 semesters of Physics, either PHY101/102 or PHY203/204
 4. Up to 2 semesters of Psychology, at least one course 200-level or higher
- d. A minimum course grade of "C" is required in all coursework used to calculate pre-professional GPA.
- e. Submission of all university transcripts.

ADMISSION

In addition, the following courses must be completed prior to beginning the professional phase of the program:

1. One semester of English Composition or Advanced English Course
 2. Four semesters of biology including one semester of human anatomy (BIO 402) and one semester of human physiology (BIO 403). Applicants lacking the advanced anatomy and physiology courses may be required to enroll in these courses the summer prior to beginning the professional phase of the program.
 3. Two semesters of physics (Physics 101, 102 or 203/204)
 4. Two semesters of chemistry (Chemistry 109, 110 or Chemistry 101, 102)
 5. Three semesters of humanities
 6. Three semesters of social sciences
 7. One semester of statistics (Mathematics 112 or Psychology 205)
- e. Evidence that the bachelor's degree will be awarded at the completion of the senior year.
- f. GRE total score (Verbal, Quantitative and Writing).

APPLICATION DEADLINE

See specific graduate program as appropriate.

TRANSFER ADMISSION

Credit for transfer work varies per program. See specific program for transfer policy guidelines. Up to nine graduate or non-degree graduate level credits may transfer. Transfer equivalencies will be determined by the director. Only courses with a grade of B or better will be considered for transfer credit.

RETURNING STUDENTS

After the lapse of one full academic year, students returning to Carroll must reapply for graduate admission. A student has a total of seven years to complete any graduate program. Upon re-acceptance, the student will receive a letter indicating his or her remaining time to complete the program.

Note: Graduate programs admit qualified students regardless of race, color, creed, sex, age, sexual orientation, national or ethnic origin, or disability that does not interfere with the performance of professional practice.

FEES 2011-2012

Specific tuition and fees vary according to program. See specific graduation programs as listed below:

Master of Business Administration	page 14
Master of Education	page 21
Master of Science in Physician Assistant Studies	page 47
Doctor of Physical Therapy	page 63
Master of Software Engineering	page 76

PAYMENT METHODS/PROCEDURES

Payments can be made online through ePAY at <https://my.carrollu.edu>

Visa, MasterCard, American Express, and eCheck are accepted. Full and partial payments can be made any time before the due dates. Payments will also be accepted through the mail and in person. For security reasons, credit card payments will no longer be accepted via telephone.

Payment Procedures

It is the responsibility of all Carroll University students to read and complete the Carroll University Financial Responsibility Agreement. This can be found online at my.carrollu.edu>Student>My Info>Financial Responsibility Agreement. Charges for tuition, fees, room and board are the obligation of the student upon registration and are due on the first day of the semester/session. Due Dates are Fall 2011: September 1, 2011; Winter 2012: January 2, 2012; Spring 2012: January 19, 2012; Summer Session I, 2012: May 14, 2012; Summer Session II, 2012: May 31, 2012; and Summer Session III, 2012: July 16, 2012. A student may attend classes, take examinations and be entitled to the benefits of a fully registered student only when all charges have been paid or satisfactory financial arrangements have been approved by the Business Office.

Course and Fee statements will be available online at my.carrollu.edu. Click on Student>Billing and Payment>View bill. If additional charges are incurred during the semester/session, a statement will be available online at my.carrollu.edu. Payment of these charges is due upon receipt of the billing.

Interest Charges

The University will use a monthly periodic rate of 1% (compounded annually), to compute the FINANCE CHARGE. The University calculates finance charges by applying the periodic rate to the adjusted balance of a student account. The adjusted balance is equal to the prior balance shown on the monthly statement less any payments and credits received on or before 30 days from the first day of the month. The student may pay the balance in full at any time. If the current balance shown on the monthly statement is paid on or before 30 days from the first day of the month, the student will incur no FINANCE CHARGE. If the full payment is not made by that date, a FINANCE CHARGE is imposed on the balance of the account. Interest and late fees will be compounded on a monthly basis and interest will be charged on the entire amount thereafter.

FEES

A student with an unpaid balance will not be allowed to register for the next semester or session, or participate in study abroad programs until that balance is paid in full. In the event of default, the University might refer the account to a credit reporting agency, a collection agency, and/or initiate legal action to collect any outstanding debt. The student will be responsible for collection costs including, without limitation, interest, penalties, collection agency fees, court costs and attorney fees.

Certificate of graduation or diplomas and transcripts of credits and credentials will be issued only to students who have settled all obligations to the University, including, but not limited to, tuition, fees, fines, and signatures on loan documents. Any student who is delinquent on a payment plan will have the above credentials held.

PAYMENT OPTION I

Due dates for payment in full of tuition/fees each semester:

Fall 2011: September 1, 2011

Spring 2012: January 19, 2012

PAYMENT OPTION II

myPAYPLAN – monthly payment plan arrangement. There are three plans available each semester. Choose a four, five or six month plan each semester to cover the balance due on your student account after tuition, fees, interest and other expenses have been offset with your financial aid and any down-payments you may have made. Your monthly payment will be based on the total outstanding balance on your student account for the current session.

Fall sign-up begins June 1, 2011

Fall plans available:

- 6 month plan – July through December
- 5 month plan – August through December
- 4 month plan – September through December

Spring sign-up begins December 1, 2011

Spring plans available:

- 6 month plan – January through June
- 5 month plan – January through May
- 4 month plan – January through April

myPAYPLAN will automatically adjust for recalculations of tuition, fees, and other expenses and financial aid. Plans will run per semester.

REFUND POLICIES

Full-time status is determined at the end of the first week of classes on the date indicated in the calendar as the last date to add classes. A full-time student who drops below 12 credits after this date will continue to be billed at full-time rates unless the student withdraws from the university.

To begin the withdrawal process the student must fill out the withdrawal form. This form may be obtained from the Office of Student Success in the Financial Aid Office. This form must be returned to the Office of Student Success so that the University can calculate the refund, if any, of institutional charges and determine the amount of aid that may need to be refunded to the various sources.

Students with federal aid who withdraw from the University will have their Title IV aid recalculated in accordance with guidelines established by the Department of Education derived from the October 7, 1998, Reauthorization of the Higher Education Act. The "Federal Refund" calculation includes tuition, fees, room, board and other charges.

The federal formula provides a return of the Title IV aid if the student received federal financial assistance in the form of a Pell Grant, Supplemental Education Opportunity Grant, TEACH Grant, Perkins Loan, Subsidized and Unsubsidized Stafford Loans or PLUS Loans and withdraws on or before completing 60% of the semester. The percentage of Title IV aid earned is equal to the number of calendar days completed in the semester divided by the number of calendar days in the semester. Scheduled breaks of five or more days are excluded.

Pro-rated Title IV federal aid is returned to the respective federal programs in the following order.

1. Federal Unsubsidized Stafford Loan Program
2. Federal Subsidized Stafford Loan Program
3. Federal Perkins Loan Program
4. Federal PLUS Loan Program
5. Federal Pell Grant Program
6. Federal SEOG Program
7. TEACH Grant
8. Any other assistance awarded to the student under programs authorized by Title IV HEA

For purposes of repayment, if funds are released to a student because of a credit balance on the student's account, then the student may be required to repay some of the federal grants released to the student. Until the repayment is resolved, the student is ineligible for further Title IV assistance. These refund policies are based upon the rules and regulations of the U.S. Department of Education and are subject to change. Worksheets used to determine the amount of refund or return of Title IV aid are available upon request at the Carroll University Business Office.

Students who withdraw and have Carroll aid and or non-Title IV aid will earn this aid according to the following schedule:

FEES

Fall 2011

Withdraw on or before	
Wednesday, August 31	0%
Monday, September 12	20%
Monday, September 19	40%
Monday, September 26	60%
Monday, October 3	80%
Tuesday, October 4	100%

Spring 2012

Withdraw on or before	
Wednesday, January 18	0%
Monday, January 30	20%
Monday, February 6	40%
Monday, February 13	60%
Monday, February 20	80%
Tuesday, February 21	100%

Part-time federal or state financial aid will be adjusted to reflect the final number of credits for which the student is enrolled on Thursday, September 8, 2011, for the fall semester or on Thursday, January 26, 2012, for the spring semester. If enrollment on either one of these dates is for fewer than six credits no financial aid will be available for the term unless the student is eligible for a Federal Pell Grant.

Although the Financial Aid Census date (adjustment date for financial aid) is one week after the semester begins, we are required by federal law to review any students who received the Federal Pell Grant. Under federal regulations, students can only receive Federal Pell Grants for the classes they attended. The regulation states the following: If a student begins attending some but not all of his or her classes, the Financial Aid Office will have to recalculate the student's Pell Grant award based on the student's actual enrollment status. Therefore, if you receive a Federal Pell Grant, we will review your enrollment status throughout the semester.

Tuition Refunds: *

- Full- or part-time students who withdraw from the University
- Part-time students who drop courses

Fall 2011:

Drop on or before	Refund
Wednesday, Aug. 31	100%
Monday, Sept. 12	80%
Monday, Sept. 19	60%
Monday, Sept. 26	40%
Monday, Oct. 3	20%

Spring 2012:

Drop on or before	Refund
Monday, Jan. 18	100%
Monday, Jan. 30	80%
Monday, Feb. 6	60%
Monday, Feb. 13	40%
Monday, Feb. 20	20%

Refunds of room and board fees are available if a resident student officially withdraws from the University. The amount is determined by the refund calculations listed above or, in the case of board fees, actual use, whichever is greater.

All refunds will be reduced by a 5% administrative fee (not to exceed \$100).

All scholarships, grants and loans must be applied to a student account before a refund check will be issued.

No refund of tuition, fees, room or board will be made to students dismissed or suspended from the University for disciplinary or academic reasons. Refunds of study abroad program registration fees are subject to regulations available in the Office of International Education.

Refund policy for military reservists called to active duty: The University recognizes the sacrifices that those in the armed services make while serving our country. We are proud to have these individuals as a part of our campus community and therefore maintain the following policy:

- The student shall provide the Registrar's Office copies of official military orders. The student will then be automatically withdrawn from all of his/her courses for the given semester. The academic record will reflect the non-punitive "W."
- The student will be eligible for a full refund of tuition and course fees for that semester for any course not completed.
- Any room and board charges will be prorated based on the period in the semester when the student is required to leave and the remaining amount will be refunded.

Withdrawal Procedures: Any graduate student who wishes to withdraw should first see the director of the specific graduate program he/she is attending. The director will conduct a brief interview with the student. Students must meet with the Director of Student Success. The office is located in the Financial Aid office on the first floor of Voorhees Hall.

All students adding or dropping a course must do so in writing through the Registrar's Office. Refunds are based on the date of the postmark of withdrawals sent by mail or on date of delivery of those brought in personally to the Registrar's Office. If a class should be cancelled by the University due to lack of enrollment, students registered for that class are given a full refund.

BookCHARGE

Charge Textbooks and Supplies to your Student Account

Currently enrolled students who have a PIONEer Card, have no holds on their student account, and have completed the *Financial Responsibility Agreement* are eligible.

BookCHARGE starts 10 days prior to the start of the semester and ends one week after the semester begins. You will need to show your PIONEer Card at the cash register. Your PIONEer Card will be swiped, which will verify your charge eligibility and then you will sign a charge receipt.

You are allowed to charge books, supplies and merchandise to your student account up to \$750 per semester. Please be responsible about your purchases. Remember, your charges will be reflected on your student account and will be billed to you.

FINANCIAL AID

Financial aid is available to graduate students who are enrolled at least on a half-time basis per semester, are degree seeking, and meet all other guidelines established by the University and the U.S. Department of Education. For financial aid purposes, half-time status is a minimum of five credit hours per semester and full-time status is a minimum of nine credit hours per semester (please see chart at end of this section for additional information on graduate statuses). Graduate students are only eligible to receive financial assistance in the form of loans, unless a scholarship or grant is received from an outside organization. Below is a brief description of the various loan programs for which a graduate student may be eligible and the application procedure.

APPLICATION FOR AID

The Free Application for Federal Student Aid (FAFSA) must be completed and sent to the federal processor. Students are encouraged to complete the FAFSA by March 1st for summer enrollment, April 15th for September enrollment, and November 1st for January enrollment. Carroll University's address and Title IV code (003838) must be listed on the FAFSA in order for the university to receive a copy of the results from the federal processor.

About 30% of students who complete the FAFSA will be randomly selected for a process known as verification. When selected for verification, student/spouse must complete a federal verification document and submit signed federal income tax information to the Carroll University Office of Financial Aid. The University is required by the U.S. Department of Education to review the documents to insure the information reported on the FAFSA is correct.

LOANS

Loans for which students enrolled at least half-time may qualify are:

Federal Subsidized Stafford Loan: Is awarded on the basis of financial need as determined by the results of the FAFSA. Students who receive a subsidized Stafford loan are not charged any interest before they begin repayment (usually six months after enrollment ends) or during authorized periods of deferment. The federal government "subsidizes" the interest during these periods. The annual maximum a student may borrow is \$8,500 and the aggregate maximum is \$65,500. The aggregate maximum includes all undergraduate and graduate loans. Funds are provided directly from the Federal Government. Applicants must complete an application and promissory note in order to officially receive the funds.

Federal Unsubsidized Stafford Loan: An unsubsidized Stafford loan is not awarded on the basis of financial need. Students who receive an unsubsidized Stafford loan are charged interest from the time the loan is disbursed until it is paid in full. Students do have the option to allow the interest to accumulate. In doing so, the interest will be added to the principal amount of the loan and additional interest will be based upon the higher amount. The annual maximum a student may borrow is \$12,000 and the

aggregate maximum is \$73,000. The aggregate maximum includes all undergraduate and graduate loans. Funds are provided directly from the Federal Government. Applicants must complete an application and promissory note in order to officially receive the funds.

Note: Information regarding interest rate, repayment and deferment options for the Federal Subsidized and Unsubsidized Stafford Loans is available through the Office of Financial Aid. This information is forwarded to eligible students with financial aid award notifications.

Federal Graduate PLUS Loan: A degree seeking graduate student who files the Free Application for Federal Student Aid (FAFSA) can apply for a Graduate PLUS loan. A Graduate PLUS loan is not awarded based on financial need. Applicants must complete an application and promissory note to apply for the loan. Funds are provided directly from the Federal Government. Students will be approved/denied based on credit history (there is also the option of having a co-signer on this loan). Students who borrow a graduate PLUS loan are charged interest from the time the loan is disbursed until it is paid in full. The annual amount available is based on the following formula: Cost of attendance minus other financial aid. Repayment on this loan begins 60 days following the second date of disbursement. There is a 10-year repayment period. The interest rate on the Graduate PLUS loan is fixed at 7.9% for all loans disbursed after July 1, 2006.

Alternative Educational Loans: If a student is in need of additional assistance after receiving the maximum Federal Subsidized and Unsubsidized Stafford Loans, he or she may be eligible to receive an alternative educational loan. In order to be eligible for an alternative educational loan, a student's cost of attendance (as determined by the Carroll University Office of Financial Aid) must be greater than the combined amount of other financial assistance. If interested, you may contact the Office of Financial Aid to find out more about the various alternative loans available.

Note: Students attending less than half-time may be eligible to borrow an Alternative Educational Loan. Please contact the Carroll University Office of Financial Aid for additional information.

OPTIONS FOR ATTENDING CARROLL

Students who wish to attend Carroll University as graduate students may choose from several options per individual graduate program policy.

Full-time — nine credits or more per semester*

1/2-time — five to eight credits per semester+

Less than 1/2-time — students who carry one to four credits per semester.

*Some graduate programs require that students take 12 or more credits per semester.

+Some graduate programs do not permit part-time enrollment.

STUDENT AFFAIRS

COUNSELING SERVICES

Personal confidential counseling is available to all full-time students at the Walter Young Center on the Carroll campus. Experienced, master's level therapists assist students with concerns regarding family, relationships, self-esteem, academic difficulties and other issues. The counseling center offers solution focused short term counseling. Students needing longer-term treatment may be referred to a community resource.

DISABILITY POLICY FOR STUDENTS

Carroll University is committed to making otherwise qualified students with disabilities full participants in its programs, courses, services, and activities. We are guided by the Rehabilitation Act of 1973, the Americans with Disabilities Act (ADA) of 1990, and the amendments to the American's with Disabilities Act of 2008. Individuals will receive reasonable accommodations according to their needs and the documentation of their disability.

Accommodation Request Process

Accommodation requests should be made through the Walter Young Center. In order to be eligible for reasonable accommodation(s) from the University, the student must provide recent, relevant, and comprehensive documentation of the disability, and the disability's impact on the student's participation in a course, program, or activity. Should documentation from the student be inadequate or incomplete, the University reserves the right to require additional documentation. The cost of providing additional documentation will be borne by the student. However, if documentation is complete, but the University seeks a second professional opinion, the University will pay for the cost of that second opinion. The University also reserves the right to deny accommodation until necessary documentation is received. Requested accommodations will be approved or disapproved by the Disabilities Services Office at the Walter Young Center following a reasonable accommodation conference. Any accommodation decision may be appealed in writing to the Dean of Students within five days of the decision. Any request for additional or modified accommodations must be made in writing to the Disabilities Services Office.

DIVERSITY

At Carroll University, diversity is a critical part of the campus culture. International and multicultural students, faculty, and staff are a vital component of the campus' richness. The university's goal is to create an environment that is open and welcoming for all people.

Carroll University is committed to supporting a diverse student body by providing comprehensive student support services and programs that allow students to explore diversity on campus, in the surrounding communities, and across the globe.

The Office of Cultural Diversity offers services and programs that support diversity such as cultural programming and activities, pre-college and mentor programs, diversity training, classroom presentations and more. These programs and services directly benefit the Carroll student body, faculty, and staff, as well as the Waukesha community. In turn, they provide the whole community with opportunities to gain a greater appreciation for the diversity represented on and off campus.

STUDENT HEALTH CENTER

The Student Health Center at Carroll is located in the lower level of the Campus Center/New Hall complex. It is staffed by nurse practitioners (NPs) and available to students from August through May with limited hours in June and July. The NPs treat students for a variety of minor illnesses and injuries. The NPs can write prescriptions after examining patients if needed, and some medications are available at the Student Health Center and are dispensed at the time of service for a fee. The NPs can also do annual physicals, pap and pelvic exams, vaccines, and TB tests required for some majors. For more information and for a list of fees, please visit our website at [https://my.carrollu.edu/ICS/Departments/Health Services/](https://my.carrollu.edu/ICS/Departments/Health%20Services/). There are modest charges to see the nurse practitioner, receive medications, have lab tests, etc. All fees are billed to the student account, with the exception that services provided in the Health Center are covered for students enrolled in the student insurance plan through Carroll University administered by WPS. Students insured under a parent's health insurance plan can request a receipt they can submit to their insurance to request reimbursement. Students needing further treatment are referred to community medical services and are responsible for any costs associated with those services. Students are solely responsible for the cost of their medical care.

Wisconsin Act 61 requires the University to provide information to students about meningococcal disease and hepatitis B and the availability and effectiveness of vaccines. Please review the information regarding meningococcal disease and hepatitis B disease and vaccines at <http://www.cdc.gov/vaccines/pubs/vis/default.htm#hepa> and <http://www.cdc.gov/vaccines/pubs/vis/default.htm#mening>. Contact your primary care provider if you have questions. If you have already received these vaccines, please include the dates you were vaccinated on your Health History Form [http://www.carrollu.edu/admissions/forms/Health History Form.pdf](http://www.carrollu.edu/admissions/forms/Health%20History%20Form.pdf). Both vaccines are available at the Carroll University Student Health Center. For students who enroll in the University sponsored student health insurance plan, all vaccines are covered at 100% if provided in the Student Health Center.

INSURANCE

Health Insurance - Carroll University is concerned about the health and welfare of all its students. Full-time graduate students are eligible to enroll in the University-sponsored student health insurance plan. F-1 international students are automatically billed for the University-sponsored student health insurance plan unless the student requests a waiver from the University-sponsored plan and demonstrates proof of comparable coverage through a sponsoring government or through an employer-based US insurance policy before the first day of school. Information about the University-sponsored

STUDENT AFFAIRS

plan can be found at <http://www.carrollu.edu/campuslife/healthSer.aspx> (international students should see the Office of International Education for information about waiver requirements unique to international students).

Student Athletes - The University carries an insurance policy that provides secondary coverage for the student athlete who may be injured during practice for, or while participating in, an intercollegiate athletic event. The student athlete is responsible for any deductible.

Vehicles - The University carries insurance on all of its vehicles. Any student receiving permission to drive a university vehicle must be approved by the University's insurance company before he or she drives any of its vehicles.

Property - Carroll University's property insurance policy covers damage to, or theft of, University-owned property only. The University's policy does not cover any personal property belonging to students.

Liability - Certain students are required to carry professional liability insurance when enrolled in clinical courses. These students include, but are not limited to, students enrolled in physical therapy, nursing students and other health science programs.

SPIRITUAL LIFE PROGRAM

The Office of the Chaplain provides opportunities for spiritual growth primarily for students through worship services, campus newspaper articles, student organizations, and personal contact by appointment, drop-in, or e-mail correspondence. The Fellowship of Christian Athletes and Intervarsity Christian Fellowship are among the recognized student organizations on campus. Students are welcome to form new organizations. Several other existing student organizations coordinate service projects that may be religious in nature (Habitat for Humanity, Circle K, Greek organizations). One large chapel (seats 180) and one small chapel (seats 18) are regularly available on campus for individual or group gatherings. The Chaplain's Office also provides local contact information for area congregations and community service agencies.

STUDENT ACTIVITIES

The Office of Student Activities enhances life on campus by providing students with social opportunities and numerous ways to get involved both on campus and in the community. There are many opportunities to get involved, including Student Senate, Greek Life, Orientation Mentors, and the campus radio station. Student Activities provides programs and services ranging from orientation to community service projects to camping equipment rentals, sponsorship of CU@Nite, the weekend programming series, and much more.

Carroll Outdoor Recreation Education (CORE)

CORE can help students backpack, paddle, or climb their way to adventure. CORE promotes safe, affordable, environmentally conscious outdoor recreation through trips, instruction, and equipment rental. This program brings to the Carroll community

numerous opportunities to explore and develop as individuals, leaders, and citizens through involvement in the outdoors. In addition to offering trips, lectures, and clinics, CORE manages the "CORE store" where students, faculty, and staff can rent tents, coolers, snowshoes, and more.

Recreation

Carroll University is a member institution of the National Intramural-Recreational Sports Association (NIRSA). The recreation program includes intramural sports, open recreation, group exercise classes, cheerleading and a bouldering wall. Ganfield Gymnasium and Fitness Center and the Pioneer Hall Fitness Center host the cardio equipment, resistance machines and free weight areas. The intramural sport program consists of several different activities including flag football, softball, men's and women's basketball, indoor soccer, and sand volleyball.

Student Organizations

Student organizations play an active role in the life of the campus. There are over 50 recognized organizations on campus, including social fraternities and sororities, Student Senate, activities board, cultural diversity organizations, a Habitat for Humanity chapter, religiously affiliated groups, academically focused clubs, and many other groups. Student publications include a newspaper and literary magazine. WCCX is the campus radio station. A wide range of arts organizations is open to students, including some by audition.

Volunteer Center

Carroll's Volunteer Center is dedicated to connecting Carroll to the larger community through service and volunteering by working with existing service learning programs at Carroll and creating new partnerships for Carroll within the surrounding communities. Students can participate in one-time volunteer events or ongoing volunteer placements at sites throughout the area.

STUDENT HANDBOOK

The specific rules and regulations of Carroll University, published in the current Carroll University Student Handbook and available to all students on the University's Web site, inform students of their responsibilities as well as their rights. The additional expectations associated with enrollment in specific academic programs are published separately.

PUBLIC SAFETY

Our mission is to assist the Carroll community in creating a safe and secure environment for learning, living, and working. The Department of Public Safety maintains staffing 24 hours a day including personnel in the dispatch office, Public Safety Officers, and off duty Waukesha County Sheriff Deputies. Public Safety both produces and co-sponsors various events during the year to help enhance the knowledge of the community related to personal safety both on campus and off.

Carroll University provides an annual security report that includes statistics for the previous three calendar years concerning reported crimes that occurred on campus; in certain off campus buildings or property owned or controlled by Carroll University; and on public property within or immediately adjacent to, and accessible from, the campus. The report includes institutional policies concerning campus security, such as policies concerning alcohol and other drug use, crime prevention, the reporting of crimes, sexual assault, and other matters. The report also includes fire safety policies and statistics, emergency notification procedures, and protocols for missing persons. The report is available in an electronic version by accessing the following website: <http://www.carrollu.edu/campus/safety/clearyact.pdf>.

You can obtain a paper copy of this report by contacting the Public Safety Center located at 208 Wright Street, which is a half block east of Campus Center or by calling 262.524.7300.

UNIVERSITY CORPORATION

2011-2012

CARROLL UNIVERSITY

The corporate name of the University is Carroll University, Inc.

Officers

Chair	Marna M. Tess-Mattner '75
Chair Emeritus	Pershing E. MacAllister '40
Vice Chair	Ted H. Baker '71
Treasurer	James M. Schneider '74
Secretary	Jeffrey T. Cummisford '73
President of the University	Douglas N. Hastad

Trustees

- Ted H. Baker '71, *Chief Executive Officer, Olson Global Markets, Providence, Rhode Island*
Deborah A. Block '74, *Senior Pastor, Immanuel Presbyterian Church, Milwaukee, Wisconsin*
JoAnne Brandes, *Executive Vice President, General Counsel and CAO (retired), JohnsonDiversey, Racine, Wisconsin*
Anthony W. Bryant, *Chairman and Owner, Century Fence Company, Pewaukee, Wisconsin*
Jeffrey T. Cummisford '73, *Vice President, Mortgage and Field Manager, Johnson Bank, Brookfield, Wisconsin*
James G. DeJong '73, *Attorney at Law-President, O'Neil, Cannon, Hollman, DeJong, & Laing, S.C., Milwaukee, Wisconsin*
Guy J. Di Spigno '69, *President, Executive Synergies, Inc., Northbrook, Illinois*
Timothy J. Hando '86, *Senior Vice President, Wealth Advisor, Certified Investment Management Analyst, The Hando Feldman Adams Group, Morgan Stanley Smith Barney, Potomac, Maryland*
Russell W. Harland '83, *ProHealth Care Medical Associates, Co-Medical Director for Critical Services, and Carroll University, Medical Director of Physician Assistant Program, Waukesha, Wisconsin*
Douglas N. Hastad, *President, Carroll University, Waukesha, Wisconsin*
Pershing E. MacAllister '40, *Chairman of the Board, MacAllister Machinery Company, Indianapolis, Indiana*
Cindy L. Mayoras '09, *Alpharetta, Georgia*
Steven C. Miller '76, *President, BeneCo of Wisconsin, Inc., Brookfield, Wisconsin*
Alice J. Morava '52, *Vice President and CEO, Stuart W. Johnson & Co., Inc., Lake Geneva, Wisconsin*
Terry M. Murphy, *Executive Vice President and Chief Financial Officer (retired), A. O. Smith Corporation, Milwaukee, Wisconsin*
José A. Olivieri '78, *Partner, Michael Best & Friedrich LLP, Milwaukee, Wisconsin*

CARROLL UNIVERSITY CORPORATION

Charmaine L. Ponkratz '77, *Vice President Marketing (retired), Marshall & Ilsley Corporation, Green Bay, Wisconsin*
Dennis G. Punches '58, *President, Payback, L.P., Waukesha, Wisconsin*
Thomas A. Quadracci, *Chairman and CEO (retired), Quad/Graphics, Sussex, Wisconsin*
E. John Raasch '67, *Attorney, Tikalsky, Raasch and Tikalsky, Waukesha, Wisconsin*
James M. Schneider '74, *Executive Chairman, Horizon Bank, Austin, Texas*
Timothy W. Sullivan '75, *President (Retired), CEO and Director, Bucyrus International, Inc., South Milwaukee, Wisconsin*
Ty R. Taylor, *President and CEO, Waukesha State Bank, Waukesha, Wisconsin*
Marna M. Tess-Mattner '75, *Attorney, Schmidt, Rupke, Tess-Mattner & Fox, S.C. Brookfield, Wisconsin*
David J. Vetta '76, *President and CEO, First Business Bank-Milwaukee, Brookfield, Wisconsin*

Alumni Representative

John A. Loppnow '62, *Insurance Agent, Robertson Ryan & Associates, Milwaukee, Wisconsin*

Honorary Life Trustees

Charles W. Anderson '59, *Brookfield, Wisconsin*
Robert V. Cramer, *Louisville, Kentucky*
Joan Hardy, *Waukesha, Wisconsin*
L.B. Hardy, *Waukesha, Wisconsin*
Lee Melville '50, *Waukesha, Wisconsin*
Richard H. Miller, *Milwaukee, Wisconsin*

CARROLL UNIVERSITY GRADUATE FACULTY 2011-2012

Douglas N. Hastad, 2006

President

B.A., Concordia College, Moorhead, Mn.

M.S., Washington State University

Ed.D., Arizona State University

Joanne Passaro, 2007

*Provost and Vice President for Academic
Affairs*

B.A., Ph.D., Duke University

Matthias Bollmus, 2007

Instructor in Business

B.A., Carroll College

*M.B.A., University of Wisconsin-
Milwaukee*

Dennis M. Debrecht, 1984

Associate Professor of Economics

B.A., Benedictine College

Ph.D., Iowa State University

Sara Deprey, 2000

*Clinical Associate Professor of Physical
Therapy*

*B.S.P.T., M.S.P.T., Finch University of
Health Sciences/The Chicago Medical
School*

*D.P.T., MGH Institute of Health
Professionals*

Rose Ann Donovan, 2002

Assistant Professor of Education

B.S., University of Wisconsin-Madison

M.A., Silver Lake College

Mark R. Erickson, 2003

*Clinical Associate Professor of Physical
Therapy*

B.S., University of Wisconsin-LaCrosse

M.A., University of Minnesota

D.Sc.P.T., Andrews University

Russell W. Harland, 2010

Clinical Associate Professor

*Director of the Physician's Assistant
Program*

B.S., Carroll College

M.D., Medical College of Wisconsin

Michelle Heinan, 2011

Clinical Associate Professor

*Assistant Director of the Physician's
Assistant Program*

B.S., Alderson-Broaddus College

M.S., Cardinal Stritch University

Ph.D., Nova Southeastern University

Kimberly K. Hofkamp, 2005

Assistant Professor of Education

B.S., University of Wisconsin-Madison

M.A.E., Silver Lake College

Jane F. Hopp, 1994

*Dean of the College of Natural Sciences,
Health Sciences and Business*

Associate Professor of Physical Therapy

B.S.P.T., University of Wisconsin-Madison

M.S., Medical College of Wisconsin

Ph.D., University of Illinois at Chicago

Chenglie Hu, 2001

Professor of Computer Science

B.S., M.S., East China Normal University

Ph.D., Wichita State University

Christopher Hurley, 2010

*Clinical Assistant Professor of Physical
Therapy*

B.S. Lake Superior State University

M.S.P.T. Walsh University

D.P.T. Simmons College

D.Sc. Andrews University

CARROLL UNIVERSITY GRADUATE FACULTY

Gerald L. Isaacs, 1978
Professor of Computer Science
B.S., University of Minnesota
M.S., Ph.D., University of Iowa

Catherine E. Jorgens, 2006
Risk Manager
Lecturer in Business
B.A., University of Wisconsin-Madison
J.D., University of Wisconsin School of Law

Michael G. Konemann, 1984
Associate Professor of Computer Science
B.S., Carroll College
M.S., Marquette University

Kathrine Kramer, 2000
Assistant Professor of Education
B.S., M.S., University of Wisconsin-Whitewater

Kerry Kretchmar, 2011
Assistant Professor of Education
B.A., New York University
M.S., Pace University

Gregory A. Kuhlemeyer, 2000
Associate Professor of Business
B.S., Western Illinois University
M.B.A., Ph.D., University of Tennessee-Knoxville

Jeffrey T. Kunz, 1981
Assistant Professor of Accounting
B.S., St. Norbert College
M.S., University of Wisconsin-Whitewater

Ann LeBaron, 2011
Clinical Assistant Professor
Clinical Coordinator of the Physician's Assistant Program
B.S. Ed., Northern Illinois University
M.S., University of Wisconsin-LaCrosse

Michael G. Levas, 1985
Associate Professor of Business
B.S., M.B.A., Northern Illinois University

David B. MacIntyre, 1996
Clinical Assistant Professor of Exercise Science
B.S., Hope College
M.S., Pennsylvania State University

Amy E. McQuade, 2010
Clinical Assistant Professor of Physical Therapy
B.S., Michigan State University
M.P.T., University of Wisconsin
Ph.D., Medical College of Wisconsin

Gary L. Olsen, 1975
Associate Professor of Accounting
B.S., Northern Michigan University
M.B.A., University of Illinois
Ph.D., Marquette University

Thomas Pahnke, 2006
Clinical Associate Professor of Physical Therapy and Athletic Training
B.S.P.T., University of Wisconsin-Madison
M.S., Purdue University

Richard J. Penlesky, 2002
Professor of Business
B.S., M.B.A., Marquette University
D.B.A., Indiana University

Robert Pickett, 2011
Assistant Professor of Education
B.A., Drake University
M.A., University of Iowa
Ph.D., University of Wisconsin-Madison

Pamela Pinahs-Schultz, 1980
Professor of Physical Education
B.Ed., University of Wisconsin-Oshkosh
M.S.Ed., Chicago State University
Ph.D., University of Wisconsin-Milwaukee

Brenda D. Reeves, 2010
Clinical Assistant Professor of Exercise Science
B.A., M.Ed. Exercise Science, Bowling Green State University
Ph.D., University of Toledo

CARROLL UNIVERSITY GRADUATE FACULTY

Elise Riepenhoff, 2007
Assistant Professor of Education
B.S., M.S., *University of Wisconsin-*
Milwaukee

Wilma Robinson, 2001
Associate Professor of Education
B.A., *Howard University*
M.P.A., *University of Wisconsin-Oshkosh*
Ph.D., *University of Wisconsin-Madison*

Robert E. Schellinger, MD, 2011
Clinical Assistant Professor
Medical Director of the Physician's
Assistant Program
B.S., *University of Wisconsin-Milwaukee*
M.D., *Medical College of Wisconsin*

Gregory J. Schultz, 2002
Senior Lecturer of Business
B.S., *Carroll College*
M.S., *Cardinal Stritch University*

Kathleen A. Shields, 2005
Clinical Assistant Professor of Physical
Therapy
B.S.P.T. *University of Wisconsin-Madison*,
M.S., *University of Wisconsin-Milwaukee*

Rachel L. Stickles, 2008
Assistant Professor of Education
B.S., *Carroll College*
M.A., *California State University-Long*
Beach
Ed.D., *University of Southern California*

Bruce L. Strom, 1990
Associate Professor of Education
B.A., *Grinnell College*
M.A., Ph.D., *Cornell University*

Frances Tuer, 2009
Assistant Professor of Business
B.A., M.B.A., *University of Western*
Ontario

Edie M. White, 2010
Assistant Professor of Education
B.A., *Mundelein College*
M.S., *National Louis University*
Ph.D., *University of Wisconsin-Madison*

Kimberly White, 2009
Assistant Professor of Education
B.S.B.A., M.Ed., *The Ohio State*
University
Ph.D., *University of Wisconsin*

Mary Ann Wisniewski, 2001
Professor of Business
B.A., *Alverno College*
M.S., *University of Wisconsin-Milwaukee*
Ph.D., *University of Wisconsin-Madison*

CALENDAR

Fall Semester 2011

Aug. 30	Tuesday	10 a.m. and 5 p.m.	Orientation for all transfer students
Sept. 1	Thursday	7 a.m.	Classes begin
Sept. 5	Monday		Labor Day – no classes
Sept. 8	Thursday		Last day to add classes. Last day to admit new students.
Sept. 29	Thursday		First-half-semester classes: last day to drop classes or change to audit
Oct. 4	Tuesday		Last day for part-time students not receiving Title IV aid to drop a class and receive a partial refund.
Oct. 8	Saturday		Homecoming
Oct. 14	Friday	5 p.m.	Mid-semester break begins (does not apply to students in M.Ed. program).
Oct. 19	Wednesday	7 a.m.	Classes resume
Oct. 26	Wednesday	9 a.m.	Registration begins for 2012 winter session
Oct. 27	Thursday	9 a.m.	Fall 2011: Last day to drop classes or to change to audit.
Nov. 14	Monday		Registration begins for spring semester 2012
Nov. 17	Thursday		Second-half-semester classes: last day to drop classes or change to audit
Nov. 23	Wednesday	4 p.m.	Thanksgiving recess begins.
Nov. 28	Monday	7 a.m.	Classes resume
Dec. 7	Wednesday		Last day of classes
Dec. 8	Thursday		Reading Day—no classes. Final exams for Thursday evening and Tuesday/Thursday evening classes
Dec. 9-14	Fri.-Wed.		Final examinations (Examination days vary by program)
Dec. 20	Tuesday	9 a.m.	Final grades due
Dec. 30	Friday		Incomplete grades lapse into “F” if no grade submitted from spring and summer.

Winter Session 2012

Jan. 2	Monday	8 a.m.	Classes begin
Jan. 3	Tuesday		Last day to add classes
Jan. 4	Wednesday		Last day to drop classes
Jan. 18	Wednesday		Classes end

Spring Semester 2012

Jan. 18	Wednesday	10 a.m. and 5 p.m.	Orientation for all transfer students
Jan. 19	Thursday	7 a.m.	Classes begin
Jan. 26	Thursday		Last day to add classes. Last day to admit new students.
Feb. 1	Wednesday	11 a.m.	Founders' Day Convocation
Feb. 17	Friday		First-half-semester classes: last day to drop classes or change to audit.
Feb. 21	Tuesday		Last day for part-time students not receiving Title IV aid to drop a class and receive a partial refund.
March 1	Thursday	9 a.m.	Registration begins for summer sessions 2012
March 3	Saturday	4 p.m.	Spring Break begins
March 12	Monday	8 a.m.	Classes resume
March 13	Tuesday		Registration begins for current students for fall 2012 semester

March 22	Thursday		Registration begins for new students for fall 2012 semester
March 30	Friday		Spring 2012: Last day to drop classes or change to audit
April 6	Friday		Good Friday – no classes
April 7	Saturday		Easter Holiday – no classes
April 9	Monday	7 a.m.	Classes resume
April 12	Thursday		Second-half-semester classes: last day to drop classes or change to audit
April 25	Wednesday		"Celebrate Carroll"
May 2	Wednesday		Last day of classes
May 3	Thursday		Reading Day – No daytime classes; final exams for Thursday evening and Tuesday/Thursday evening classes
May 4-9	Fri-Wed		Final exams (Examination days vary by program)
May 10	Thursday	1 p.m.	Final grades due (for graduating students)
May 13	Sunday		Baccalaureate and Commencement
May 15	Tuesday	9 a.m.	All final grades due
May 31	Thursday		Incomplete grades lapse into "F" if no grade submitted from fall and winter.

Summer Sessions 2012

Session I (May 14– June 4)

May 14	Monday		Classes begin
May 16	Wednesday		Last day to add classes
May 18	Friday		Last day to drop classes or change to audit
May 28	Monday		Memorial Day – no classes
June 4	Monday		Classes end

Session II (May 31 – July 13)

May 31	Thursday		Classes begin
June 7	Thursday		Last day to add classes
June 21	Thursday		Last day to drop classes or change to audit
July 4	Wednesday		4th of July Holiday – no classes
July 12	Thursday		Classes end

Session III (July 16 – August 24)

July 16	Monday		Classes begin
July 23	Monday		Last day to add classes
Aug. 6	Monday		Last day to drop classes or change to audit
Aug. 24	Friday		Classes end

The University offers other courses during the summer on a specially timed basis. The last day to drop classes or change to audit is no later than two-thirds through the course.