

An aerial photograph of Alfred University's campus, showing various brick buildings, green lawns, and surrounding forested hills. The sky is filled with large, colorful clouds in shades of pink, orange, and purple, suggesting a sunset or sunrise. A dark purple rectangular box is overlaid on the right side of the image, containing the university's name and catalog information.

Alfred University

OUTSIDE *of* ORDINARY

2019-2020 GRADUATE CATALOG

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Academics

Graduate Programs

Alfred University grants graduate degrees at the master's and doctoral levels. In addition, six post-master's advanced certificates are offered:

Art

Master of Fine Arts

- Ceramic Art
- Electronic Integrated Arts
- Painting
- Sculpture/Dimensional Studies
(with concentration in glass art or sculpture)

Business

Master of Business Administration

- Accounting
- Business Administration

Counseling and School Psychology

Master of Science in Education and Certificate of Advanced Study

- Counseling (School Counseling Track)
- Mental Health Counseling

Master of Science in Education

- College Student Development

Master of Arts and Certificate of Advanced Study

- School Psychology

Doctor of Psychology

- School Psychology

Engineering and Science

Master of Science

- Biomaterials Engineering
- Ceramic Engineering
- Electrical Engineering
- Glass Science
- Materials Science and Engineering
- Mechanical Engineering

Doctor of Philosophy

- Ceramics
- Glass Science
- Materials Science and Engineering

AUNY (Off-Campus) Programs

Master of Science in Education

- Counseling
- Literacy Education

Master of Public Administration

- Public Administration

Certificate of Advanced Study

- Care Management (post-baccalaureate)
- Counseling
- Gerontology Administration & Management
- Gerontology – Clinical Services
- Mental Health Counseling

Credits, Grades and Grade Point Average (GPA)

Grading in graduate courses (except for thesis/project credit and all courses offered by the School of Art and Design) is as follows:

Grade	Grade Points per Semester Hour	Meaning
A	4.00	Exemplary
B +	3.50	Exceeds Expectation
B	3.00	Meets Expectations
C	2.00	Below Expectations
F	0.00	Failure
I	0.00	Incomplete
IP	0.00	In Progress

Graduate courses offered by the School of Art and Design are graded only HP (High Pass), P (Pass), NC (No Credit), IP or I. When undergraduates enroll in 500 level courses they are graded on the graduate scale.

Graduate thesis credits are reported using the P or NC grades. Mid-term grades are not required for 500 or 600 level courses.

The grade of I indicates incomplete course work due to circumstances beyond the student's control. The Registrar shall change the grade of I to F in letter graded courses (those receiving a final grade of A, B+, B, C, or F) and in courses graded Pass/Fail if the incomplete is not removed within the succeeding semester, unless the instructor grants an extension of one additional semester for completion of the unfinished work. If the work remains incomplete at the end of the additional semester, the Registrar shall change the grade of I to F.

The grade of IP (In Progress) may be given for thesis, project, and seminar courses when the work extends by design over multiple terms. The IP indicates that work is in progress and a final grade will be given in the future.

Auditing of Courses

A student may elect to take a course on a non-credit or "audit" basis. The student may also change from credit to audit or vice-versa until the last day to withdraw from the course as designated in the Academic Calendar. An auditor receives a grade of "AU" in the course, and this is recorded on the transcript. Courses audited are charged at 50% of the normal tuition rate.

Any student registering as an auditor in a class must consult the instructor to determine the level of participation the instructor expects of an auditor. If any auditing student fails to meet the expected level of participation, the instructor will notify the Registrar at the end of the term, and the Registrar will withdraw the student from the class.

Calculating the Grade Point Average (GPA)

Only credits attempted at Alfred University which have received final grades of A through F shall be used to calculate GPA. The term GPA is calculated by dividing the total grade points (or "quality points") earned by the "GPA Hours" for that term. The cumulative GPA shall be calculated by dividing the total grade points earned at the University by the GPA hours.

Courses completed with grades of HP, P and A through C will be counted as credit earned. Courses with grades of W, I, NC, IP, F, and AU will not be counted as credit earned.

Repeating of Courses

When a course is repeated, the course value shall be used only once and the grade points corresponding to the last grade earned shall be used in calculating the cumulative grade point average. While the original grade is no longer used in the GPA, it remains a part of the record and it appears on the student's transcript.

Transfer Credit

Transfer credit evaluations from other accredited institutions shall be made by the Dean or appointed representative of the college or school in which the student is enrolled or wishes to enroll. The evaluation is forwarded to the Registrar's Office to be placed on the student's permanent record. No more than six semester credit hours of graduate work, or 20% of coursework, whichever is greater, may be transferred into a master's degree or certificate of advanced studies program. Doctoral programs permit up to 50% of coursework as transfer credits.

Grade Changes

All grade changes must be completed prior to the Registrar's certification of graduation. Assigning course grades at Alfred University is the exclusive responsibility of course instructors. Nothing in this policy shall be construed to limit the ability of the Registrar to change grades of incomplete (I) to fail (F) in accordance with the policy on grades of "Incomplete." Nothing in this policy shall be construed as substituting or supplanting rules, regulations, or procedures contained in the policy on Academic Dishonesty.

- A grade may be changed by the instructor of a course to convert an Incomplete or IP to a final grade.
- A grade may be changed by the instructor of a course to correct an error. The Division/Program Chair and appropriate Dean must be notified of all grade changes in writing (stating reason(s) for the change) except for completion of work in courses graded I or IP.
- Once assigned, only the course instructor can change a course grade, except in rare circumstances when the course instructor's supervising Dean may change a grade. (See Appendix A in the Graduate Academic Regulations on my.alfred.edu for information on the circumstances under which a Dean may change a grade.)

Students have one year from the date a final grade is issued to petition for a change of grade. A student who believes a final grade is not correct should first meet with the instructor who assigned the grade. If the matter is not resolved, the student should meet with the Division/Program Chairperson in the academic area offering the course in question. If there is no resolution, the student should arrange a meeting with the Dean, or the Dean's designee, of the College or School offering the course.

- If there is still no resolution, the student may appeal the decision of the faculty member to the Ombuds Officer. Should a request for an appeal be made to the Ombuds Officer an appeals committee will be assembled.
- The appeals committee should meet as soon as possible after members of the committee have been selected. The appeals committee will review the case and prepare a written recommendation to be forwarded to the Provost. The Provost will make the final decision within seven semester days and officially notify, in writing, the student, the instructor(s) and Dean involved in the case.
- The student may bring one other student or employee from Alfred University to the appeals committee hearing. Only

members of the university community shall be permitted to attend the hearing.

- The invited other person shall not have the right to speak or otherwise participate in the hearing. No sound or video recording of the appeal committee hearing shall be permitted. All testimony given at the hearing shall be considered confidential except for communication to appropriate university faculty and administrators.

Classification of Students

Full-time Student

An enrolled student currently registered for 12 or more semester credit hours.

Part-time Student

An enrolled student currently registered for fewer than 12 semester credit hours.

Degree-seeking Student

Admitted to the Graduate School and enrolled in a program in which the student anticipates earning a degree.

Unclassified (non-degree) Student

Not admitted to the Graduate School or seeking a degree at AU. Non-degree students:

- May complete no more than twelve credit hours without applying for admission to a graduate program
- Must be admitted to the Graduate School at least 24 semester hours prior to graduation

Definition of Semester Credit Hour

The typical academic load of full time students at Alfred University is 16-18 credit hours per semester.

- Most courses meet for 1 (50-minute) hour per week for each semester credit hour, or the equivalent.
- Courses with labs typically meet for 2 to 3 hours per week of class time plus 2 to 3 hours per week of lab time.
- Art studios meet 1.5 to 2 hours per week for each credit hour.

On a weekly basis, students should expect to spend a minimum of two hours outside of class studying and completing assignments for each hour spent in class (three hours per week outside of class for each hour in class for art studios); which is a minimum of 45 hours of total learning time per credit hour for the term. Students taking an online course should, likewise, expect to spend about 45 hours of total learning time per credit hour in a term; the same amount of time as in a traditional, on-campus course.

The Registrar and the Deans review the class schedule each semester and review at least annually courses and programs as published in our catalogs in order to ensure compliance with credit hour requirements.

Graduation Requirements

All work done in satisfaction of the requirements of an Alfred University master's degree must be completed within a period of six consecutive calendar years from the beginning of the term of admission to the program.

No more than six semester credit hours used to satisfy the requirements of one master's degree program may be used to satisfy the requirements of another.

An online or written application for the conferring of an advanced degree must be made to the Registrar at the Student Service Center at least 60 days before the expected graduation date. The awarding of any degree depends upon the satisfactory completion of the course of study prescribed by the faculty of the degree program elected. The University reserves the right to withhold the diploma for poor scholarship or for other reasons. The detailed requirements for each program of study are found in the "Degree Programs" section beginning on p. 9.

Graduate Academic Standing

The Graduate School reserves the right to deny further registration to any student who is not making satisfactory progress. Course work presented in satisfaction of requirements for a graduate degree must be an average grade of B or better (3.00 GPA).

Scholastic Standards Committees for each graduate program will review every student's record each semester. They may recommend academic probation, suspension, or dismissal for students who do not meet a GPA standard of 3.00 or better each semester and cumulatively or who do not make satisfactory progress in other ways.

Students matriculated in graduate degree programs must meet academic and performance requirements established by each program.

Any student who fails a qualifying or comprehensive examination for the second time is dismissed from the graduate program.

Student Appeal for Change of Academic Standing

A student appeal for change of academic standing will be made through the student's Dean for presentation to the Graduate Program's Scholastic Standards Committee. The request must be made within 10 business days following notification of the change in academic standing. Programs may appoint a separate Scholastic Standards Appeals Committee to conduct such hearings.

If the student is not satisfied with the decision of the Scholastic Standards Committee, or Appeals Committee on the question of the appeal, the student may further appeal, in writing, to the Provost.

Registration, Scheduling and Attendance

Any degree-seeking student in attendance during the previous semester who does not complete his/her registration during the period designated by the Academic Calendar will be considered a late registrant. A late registrant should complete registration as soon as possible. Late registrants are subject to a \$35 late registration fee.

Advisor approval is required for each student's schedule or study plan each term. Graduate students may also need the approval of the Director of the program. This requirement applies to both full-time and part-time students in the degree programs.

Adding and Dropping Courses

A course may be added or dropped during the periods indicated in the Academic Calendar. Any course dropped will not appear on the student's transcript. The approval of the student's Dean is required for a student to add or drop after the published deadline and will only be granted in extreme cases. If granted, a \$35 late fee is assessed.

Withdrawing from a Course

A student may withdraw from a course and receive the grade of W with the signature of the lecture instructor and the approval of the student's advisor during the period designated in the Academic Calendar. The approval of the student's Dean is required for a student to withdraw from a course after the published deadline and will only be granted in extreme cases. If granted, a \$35 late fee is assessed.

Attendance

Regular class attendance is expected of all students. Faculty members establish their own policy on attendance and communicate it to students. A student in a closed course who does not attend the first class meeting or communicate with the instructor or the Registrar's Office by the close of the day of the first class may be dropped from the course.

Withdrawal, Leave of Absence, Readmission

Withdrawal from the University and Leave of Absence

Graduate students should discuss their reasons for taking a leave of absence or withdrawing from the program with their academic advisor or director of the graduate program in which they are enrolled. Some graduate programs may prohibit or restrict leaves of absence; check with the Program Director.

- A leave of absence for medical reasons must be approved through the Dean of Students. A student who is granted a leave to deal with medical and/or psychological issues must submit a medical or clinical evaluation to the Dean of Students before consideration can be given for return to Alfred University.
- If planning to take a leave of absence, determine when you anticipate returning to the program. Students on an approved leave of absence who do not resume studies when the leave expires are subject to administrative withdrawal from the University.
- Students should consult with a Financial Aid counselor to understand their obligations.
- If withdrawing or taking a leave of absence once a semester is underway, a student's financial obligations are based on the date of filing of the official Withdrawal/Leave of Absence form with the Director of the student's Graduate Program.

Grades for Students Leaving School during the Semester

A student who formally leaves school during a semester will be given W grades in registered courses providing the last date to withdraw from each course as published in the Academic Calendar has not passed. In those courses where the last day to withdraw has passed, the instructor will record a final (non W) grade.

In cases of special circumstances the Director of Graduate Studies may permit W grades to be recorded for any or all courses after the deadline has passed.

Readmission

A student who has withdrawn from the University or been suspended or dismissed for any reason may be granted the opportunity to return. Application for readmission must be in writing to the Director of Admission. These applications should be submitted at least one month prior to the time the student is eligible to return.

Academic Dishonesty (Unethical Practices)

Definition

Academic dishonesty is defined as any action that enables students to receive credit for work that is not their own. Academic dishonesty, as well as fabricating and inappropriately altering or excluding data, is unethical conduct which will not be tolerated in any form. Graduate students at Alfred University are expected to maintain generally accepted standards of academic honesty and professional integrity. Failure to do so may range from failure of the assignment to dismissal.

Academic dishonesty can occur both in and outside the classroom, studio, or lab.

In the context of tests, quizzes, examinations, or other in-class work, dishonest practices include but are not limited to:

- Marking an answer sheet in a way designed to deceive the person correcting it
- Possession of unauthorized material that could be used during a quiz, test, or examination for the purposes of cheating
- The unauthorized use of books or notes during a quiz, test, or examination
- The hiding or positioning of notes or other tools for the purposes of cheating on a quiz, test, or examination
- Possession or knowledge of any examination prior to its administration
- Looking at someone else's quiz, test, or examination without the express permission of the instructor
- Any form of unauthorized communication during a quiz, test, or examination

In the context of writing assignments, research projects, lab reports, and other academic work completed outside the classroom, dishonest practices include but are not limited to:

- Lack of adequate and appropriate citation of all sources used
- The appropriation of another's ideas, analysis, or actual words without necessary and adequate source citations, either deliberately or inadvertently
- The copying, purchase, or other appropriation of another person's academic work with the intention of passing it off as one's own original production
- The creation of a document by more than one student that is then submitted to the instructor as the original creation of only one student, without the express permission of the instructor
- Submitting the same piece of work to more than one instructor without the express permission of ALL instructors involved
- Fabrication of data
- Inappropriate alteration or exclusion of data

Guidelines for Avoiding Dishonest Behavior

The following guidelines are included to assist students in avoiding dishonest behavior in their academic work, particularly in writing assignments, research projects, and lab reports.

- a) Students' written work should reflect their own personal preparation for the assignment, such as reading books and articles, performing research on the internet and in electronic databases, and taking notes in class and during the research process.
- b) Students should avoid using the actual words of the authors of their sources whenever possible, opting instead to demonstrate an understanding of the authors' ideas by rewriting them in their own words.
- c) All ideas and analyses that are derived from other authors must be attributed to those authors in the form of appropriate source citations, even when their own words are not used. Source citations usually take the form of footnotes, endnotes, or parenthetical citations in addition to a formal bibliography and/or works cited page at the end of the writing assignment. The format for these source citations depends on the conventions of each academic discipline: consult your instructor as to the appropriate form to use.
- d) When the use of an author's specific text is unavoidable or necessary, that material must be identified as a direct quotation and must either be surrounded by quotation marks or formatted as a block quotation. Appropriate source citations must follow all quotations, as per the instructions above.
- e) Circumstances when direct quotation is necessary or desirable include:
 1. The wording of the text is essential to the student's own analysis.
 2. The text exemplifies the author's particular perspective.
 3. Quoting the text is a more efficient way of presenting the author's ideas than a more elaborate and lengthy paraphrase would be.

It should be noted that lengthy quotations or their overuse is neither desirable nor appropriate in most instances and should be avoided. Additionally, over-reliance on lengthy quotations can be considered a form of plagiarism.
- f) Some instructors find collaborative assignments useful. Students may be allowed to collaborate in shared assignments only with the specific permission of the instructor. In those circumstances the limits to the collaboration will be established by the instructor and students should be aware that they are responsible for maintaining the appropriate limits to that collaboration.

Procedures

Instructors who believe an unethical practice has occurred should take the following steps:

- a) The instructor will advise the student orally or by e-mail as soon as possible after the offense is observed. This will allow simple misunderstandings and misinterpretations to be resolved.

- b) If the instructor remains convinced that an offense has occurred, a written statement of the offense will be sent to the student in hard copy and by e-mail. The statement will include whatever penalty the instructor considers appropriate; a copy will be sent to the instructor's dean, the student's dean or program chair, and, if the recommended penalty is dismissal, the Associate Provost for Graduate Programs.
- c) The academic dean or program director of the student's college/program should advise the student of appeals procedures which are available.

A student charged with an unethical practice may appeal to the appropriate program committee.

Any student dismissed from the Graduate School may request reconsideration of the matter by the Graduate Council; such requests to be made within 14 days of the notice of dismissal. If not satisfied with that reconsideration, the student may appeal to the Associate Provost for Graduate Programs; such appeal to be made within 14 days of dismissal.

Accreditation

Alfred University is accredited by the Middle States Association of Colleges and Secondary Schools. It is an institutional member of the American Council on Education, the Association of American Colleges, the College Entrance Examination Board, and the Council of Graduate Schools in the United States. Because all graduate programs are specifically approved by the New York State Education Department, students who are residents of New York State are eligible for Scholar Incentive Awards. The appropriate graduate programs in Education, School Psychology, School Counseling, and Mental Health Counseling have been registered by the Education Department and recipients of such graduate degrees are eligible for the corresponding certification or licensure in New York State. Additional program-specific accreditations are listed below.

- The Art and Design program is accredited by the National Association of Schools of Art and Design (NASAD).
- The Masters in Business Administration program is accredited by the Association to Advance Collegiate Schools of Business - International (AACSB).
- The Master of Education/Certificate of Advanced Study programs in School Counseling and Mental Health Counseling offered by Alfred University's Campus-Based programs are accredited by the Council for the Accreditation of Counseling and Education Related Programs (CACREP).
- The Master of Arts/Certificate of Advanced Study Program in School Psychology is approved by the National Association of School Psychologists (NASP). Graduates are eligible for the Nationally Certified School Psychologist (NCSP) credential available through NASP.
- The School Psychology Doctoral Program is accredited by the American Psychological Association (APA) and Approved by the National Association of School Psychologists (NASP). In addition, graduates of the doctoral program in School Psychology are eligible for licensure as a psychologist in New York State.

Research

Members of the Alfred University faculties are actively engaged in research in many academic areas. Current research projects are supported by governmental agencies, the State of New York, and industrial sponsors. Participation in such scholarly activity is a part of the training of all graduate students, as appropriate to the program missions.

Division of Counseling and School Psychology

The Division of Counseling and School Psychology is well known for the continuing contributions of its faculty to the scholarly literature in psychology, school psychology, educational psychology, counseling, and special education.

Faculty members in the Division work cooperatively with Master's and Doctoral students, and with faculty members in other divisions and other universities. They conduct research in their areas of specialization, supervise dissertation research, direct sponsored projects, serve on the editorial boards of journals, and collaborate with schools and agencies to provide training and conduct applied research and program evaluation projects.

Doctoral students in School Psychology participate in a scholarly apprenticeship throughout their program of study, under the direction of their advisor or other mentor. The apprenticeship is designed to introduce students to the process of scholarship and to supplement coursework in research methodology. The Division has a number of resources for the support of graduate student research.

The Lea R. Powell Institute for Children and Families is an umbrella organization for the service, training, and research activities undertaken by the Division. It includes the Child and Family Services Center (CFSC) and the Powell Development Program.

The Child and Family Services Center (CFSC) at the Powell Institute is a spacious mental health facility that provides community-based educational and counseling services to children, families, and adults. The CFSC is equipped with state-of-the-art audio-visual observation system that allows graduate students to receive live, in-the-moment supervision, in addition to weekly individual and group supervision activities. A variety of educational and therapeutic services are provided by graduate students, under the direct supervision of a licensed psychologist or mental health counselor. Services include psychoeducational assessments for children and college-aged individuals, individual and family therapy, play therapy, group therapy, and school consultation. The CFSC also provides a setting for faculty and student applied research projects.

The Institute's Powell Development Program is designed to provide training and support research activities of faculty and students in the Division. Training activities and resources offered through the Powell Development Program include fellowships in school psychology, honors awards for outstanding school psychology performance, continuing professional development opportunities for school and mental health agency personnel, annual Powell Distinguished Lecture Series, and the availability of therapeutic resources in the Melinda Welter Library. The Powell Development Program supports the research activities of faculty and students through

facilitating collaborative research proposals, coordinating ongoing research activities, funding dissertation research projects of students, and providing start-up support for faculty research programs.

Through the sponsorship of the Powell Institute for Children and Families, the Division of Counseling and School Psychology has been awarded numerous governmental- and privately-funded training and research grants totaling over nine and half million dollars. These projects have supported the advanced training of school psychology students in the delivery of specialized psychological services to children and families, multi-tiered system of educational service delivery and school improvement, as well as preparation to become faculty members in higher education. Research programs have focused on provision of mental health services in rural communities, rural justice, and school crisis prevention and response.

Division of Education

The faculty members in the teacher education programs are active researchers dedicated to excellence in training and practice. With expertise in inclusive education, disabilities, literacy learning, development of critical thinking skills, and teaching with technology, education faculty are active in professional associations and scholarship. Successfully funded external grants have centered on inclusive education, and case study teaching approaches.

College of Business

Research is an essential part of the mission of the College of Business, with specific goals to conduct discipline-based, applied, and instructional research that bridges the gap between business theory and practice. Faculty members at the Alfred University College of Business have established international collaborations with research partners in Korea, China, Germany, Australia and Turkey on a variety of research topics. Students in the Master's in Business Administration (MBA) program have the opportunity to work as research assistants under the mentorship of faculty advisors. These research opportunities have resulted in co-authorships of journal articles and invitations to present research at regional and international forums.

Kazuo Inamori School of Engineering

The faculty in the Inamori School of Engineering is well known for its contributions to various fields of science and engineering. They direct sponsored research projects, supervise undergraduate and graduate research theses, contribute to the science and engineering literature, and participate in professional engineering societies.

The School actively promotes the collaborations of its student and faculty with other science and engineering professionals. Students participate in internships and on-campus research projects sponsored by industrial organizations, national laboratories, and government agencies. Graduate students and faculty conduct experiments at national and international user facilities. Members of the faculty serve as visiting scientists and visiting professors at other research and education institutions.

Research in the Kazuo Inamori School of Engineering ranges from basic science to applied engineering. In the materials programs, areas of specialization include atomistic and macromechanical modeling; solid-state chemistry; powder

synthesis and characterization; nanomaterials and powders; ceramic processing, sintering and manufacturing; structural and high-temperature materials; electroceramics; electrochemical conversion; interfaces and composites; biomaterials; glass; optical materials; and materials characterization. In the Mechanical Engineering program, areas of specialization include heat transfer, mechanics of materials, and finite-element modeling, and renewable energy systems. In the Electrical Engineering program, areas of specialization include thin-film deposition, control systems, and renewable energy systems. More information about the specific activities and research interests of the faculty can be found at <http://engineering.alfred.edu/facultyandstaff/>.

The Kazuo Inamori School of Engineering maintains an annual research budget of around \$5M. The research is sponsored by federal and state agencies, industrial organizations, philanthropic foundations, and the New York College of Ceramics. Monies received through these grants and contracts support the educational mission of the School. Many undergraduate and graduate students work on sponsored projects, gaining experience as well as financial assistance.

Several focused research and educational centers reside within the School of Engineering. The Center for Advanced Ceramic Technology (CACT) – a joint enterprise between the University, government, and industry – facilitates research and development of high-technology ceramics that possess the potential for to profit both the scientific community and the industrial base of New York State.

The Center for High Temperature Characterization provides academic and industry researchers access to state-of-the-art facilities for characterizing and measuring the properties of materials at high temperatures and controlled environments.

School of Art and Design

The Fine Arts graduate programs at Alfred University, School of Art and Design are ranked in the top eleven nationally by US News and World Report. The graduate program in Ceramic Art is consistently acknowledged as number one and the graduate program in Sculpture/Dimensional Studies is ranked as number fifteen. Alfred's ceramic artists, sculptors, painters, printmakers, photographers, video artists, designers, and art history scholars are recognized by galleries and museums worldwide. They have received numerous grants, served on major art councils and museum boards, and have traveled internationally as visiting artists and scholars. Faculty and student exchange programs exist in China, Australia, and Europe. The expertise of these men and women provides a cutting edge, as well as comprehensive education in Art and Design.

Religious Beliefs and Class Attendance

No person shall be expelled from or refused admission as a student to an institution of higher education for being unable, because of religious beliefs, to attend classes or to participate in any examination, study or work requirements on a particular day or days:

- Any student who is unable, because of religious beliefs, to attend classes on a particular day or days shall, because of such absence, be excused from any examination or any study or work requirements

- It shall be the responsibility of the faculty and of the administrative officials of each institution of higher education to make equivalent opportunities available to any student absent from school because of religious beliefs, to make up any examination, study, or work requirements which might have been missed because of such absence. No fees of any kind shall be charged for making such equivalent opportunity available
- If classes, examinations, study or work requirements are held after 4:00 p.m. on Friday, or on Saturday, similar or makeup classes, examinations, study or work requirements shall be made available on other days, where it is possible and practicable to do so, and no special fees shall be charged for these.

In carrying out the provisions of this section, it shall be the duty of the faculty and of the administrative officials to exercise the fullest measure of good faith. No adverse or prejudicial effects shall result to any student because of availing him/herself of the provisions in this section.

Any student who is aggrieved by the alleged failure of any faculty or administrative official to comply in good faith with these provisions shall be entitled to maintain an action or proceedings in the supreme court of the county to enforce his/her rights under this section.

Graduate Degree Programs

School of Art and Design

Master of Fine Arts

The Program

The objective of the Master of Fine Arts degree is to prepare individuals for careers in Ceramic Art, Electronic Integrated Arts, Painting or Sculpture/Dimensional Studies (with concentration in glass art or sculpture).

This two-year program is highly competitive; only eight Ceramic Art, five Electronic Integrated Arts, seven Painting and five Sculpture/Dimensional Studies students are admitted annually. Each accepted MFA candidate in Ceramic Art, Electronic Integrated Arts and Sculpture Dimensional Studies receive full tuition waivers and a financial stipend, either as a teaching assistant or as a graduate assistant. The Painting program does not offer tuition waiver.

In addition to studio courses, all graduate students take credits in a series of seminars, art history, studio electives and technical courses relevant to their area of study.

In the second year, students write a thesis and present a MFA thesis exhibition in the School of Art and Design's Fosdick-Nelson Gallery, Robert C. Turner Gallery or an approved alternate site.

Application

Applicants for admission should hold the baccalaureate degree with the equivalent of sixty credit hours in studio courses. A portfolio of completed works could be considered the equivalent of some studio courses.

In addition to the transcripts and letters of recommendation required of all students, applicants to the M.F.A program must present a portfolio showing competency in the appropriate areas. All applicants must conform to the current area specifications as listed on the following link
<https://alfred.edu/academics/graduate-programs/index.cfm>

The School of Art and Design of the New York State College of Ceramics at Alfred University offers graduate study in four divisional areas: Ceramic Art, Electronic Integrated Arts, Painting and Sculpture/Dimensional Studies (concentration in either glass art or sculpture). Applicants should make clear to which MFA program they are applying.

All applications are made through the Graduate Admissions Office and all supporting documents and the portfolio must be submitted to the Graduate Admissions Office by January 15th of the application year. Only completed applications will be forwarded to the Faculty Review Committee. It is important to clearly indicate which program you want to enter, as documentation and portfolios are only reviewed by the faculty in the specific program indicated on the application form.

No applications for January enrollment are considered.

Accepted Applicants must make a \$200 deposit and may be asked to return a signed contract as directed in the notification of acceptance or their acceptance becomes void.

Financial Support

In addition to a grant for full tuition waiver for both years of residency in the program, MFA students in Ceramic Art, Electronic Integrated Arts and Sculpture Dimensional Studies are guaranteed an assistantship for every semester of the two-year program.

Graduate assistantships consist of two types: a teaching assistantship, a graduate assistantship as a facilities coordinator. In all cases, the student receives a stipend of \$4,750 for the academic year.

Graduate teaching assistants help faculty members in the performance of their academic duties; a graduate teaching intern teaches one (four credit hour) studio course per semester; and a facilities coordinator works with the division head and technicians to organize and manage studio facilities. All assistants have a commitment of approximately 10 hours/week to meet the requirements of the stipend. Assignments are made in consultation among faculty, students and division chairs at the beginning of each semester.

Ceramic Art

Applicants to the Ceramic Art program must indicate a commitment to working with ceramic materials and processes. The Ceramic Art program embraces all aspects of ceramic art that pursue inquiries into utility, pottery, the vessel, sculpture, the figure, architectural application, the decorative, installation and performance.

The M.F.A program in Ceramic Art at Alfred University has a distinguished history as a premier institution for education in the arts. The program's curriculum, facilities, and environment foster the pursuit of visual and verbal expression, technical innovation and intellectual access to personal growth. The graduate program in the Division of Ceramic Art is an intense studio-based experience that stresses the development of concepts through making; the faculty aim to provide the highest caliber of education for students whose talents and aspirations are primed to flourish. The launch of the student's emergence into the professional art community is the thesis exhibition and articulated defense of the work's premise.

Electronic Integrated Arts

The MFA in Electronic Integrated Arts is an interdisciplinary approach to electronic and digital processes. It provides a context in which to explore the relationships between the languages, processes, and forms of emerging electronic/digital technologies with those of painting, printmaking, photography, design, video, and sonic art.

This program of interdisciplinary study is committed to permeating the shared boundaries between traditional and expanding technologies and is grounded in digital media. Students who complete this M.F.A program will be prepared to take their place in the world as practicing artists, educators, and leaders who are discovering new spheres of cultural discourse and making significant contributions in the field of emerging digital media practices.

Painting

The Division of Drawing, Painting and Photography offers an international MFA Program in Painting. The program operates jointly in the School of Art and Design at Alfred University and in Dusseldorf, Germany. Graduate students

work with American and European artists and scholars, gaining an international perspective while interacting with art communities on two continents. Through concentrated studio time, significant research opportunities, and mentoring from art world professionals, this program offers a graduate experience that prepares students to become the next generation of professional artists and arts practitioners.

Applicants must be committed to extended international study and the practice of painting. Graduate students spend half of each academic year in Dusseldorf engaging in intensive studio work, research, and professional practices. The program encourages a diversity of approaches within the unique language of painting, and fosters critical dialogue addressing contemporary global perspectives.

Sculpture/Dimensional Studies

The Sculpture Dimensional Studies Division at Alfred University fosters progressive creative growth and stimulates innovative technical and conceptual development in each individual student. The diverse faculty aim to foster thoughtful exploration into a wide range of materials and processes that challenge and examine the ever expanding field of sculpture. Curricular breadth and depth is grounded in a tradition of material exploration where students also engage with historical and contemporary research thus priming students to succeed as active participants in the international art world. The MFA program simultaneously prepares graduate students to be both practicing artists and teachers.

Concentration in Glass Art

Applicants to the Glass Art program will have made a commitment to working with glass as a medium for artistic expression.

Concentration in Sculpture

Applicants to the Sculpture program will have made a commitment to the making of sculpture with or without media specificity.

Degree Requirements

Degree requirements include two years of residence and a minimum of sixty graduate credit hours. Reviews of work are scheduled at midterm and at the end of each semester.

First-Year Requirements – Ceramic Art

Advanced Ceramics (Fall and Spring)	16-20
ART 582 Ceramic Materials I: Claybodies and Glazes (Fall)	2
Choice of at least one of the following technical courses: (Spring 1 st Yr or Fall 2 nd Yr)	2
ART 583 Ceramic Materials II: Problem-solving for Artists	
ART 584 Intro to Kiln Procedures and Construction	
ART 587 Intro to 3D Modeling and Rapid Prototyping	
ART 590 Methods of Digital Output	
ART 500 Topics in Ceramic Art (Spring)	2
Studio Electives (Spring 1 st Yr or Fall 2 nd Yr)	0-4
ART 560 Ceramic Graduate Seminar	2
ARTH 539 History of Ceramic Art/Craft/Design (Fall)	4

First-Year Requirements – Electronic Integrated Arts

Advanced Electronic Arts	16
ART 523 Work and Analysis	8
ART 524 Electronic Strategies (non-time based)	4
ART 526 Electronic Strategies (time based)	4
ART 660 First Year Graduate Seminar	2
ARTH Art History/Criticism	4
Electives	0-4

First-Year Requirements – Painting

ART 540 Graduate Painting	12
ART 542 Graduate Painting Critique/Discussion	8
ART 544 Professional Practices	4
ART 660 First Year Graduate Seminar	2
ARTH 544 In the Studio: Painting	4
Electives	0-4

First-Year Requirements – Sculpture/Dimensional Studies

<i>Concentration in Glass Art and Sculpture</i>	
Advanced Sculpture/Dimensional Studies	16-20
History of Art	4
Studio Practice	2
ART 660 First Year Graduate Seminar	2
Electives	0-4

Overview of Required Courses

Ceramic Art

ART or ARTH 500 or higher level Electives* (outside major concentration)	4
May include ART 501, 550, 500, 535, 587, 590, 601, or other graduate level courses approved by advisor.	
ART 552 Advanced Ceramics* (credits per semester, 1st Year)	8-12
ART 582 Ceramic Materials I: Claybodies & Glazes	2
Choice of at least one of the following technical courses: (Spring 1 st Yr or Fall 2 nd Yr)	2
ART 560 Ceramics Graduate Seminar	2
ART 581 Intro Kiln Procedures and Construction	
ART 583 Ceramic Materials II: Problem-solving for Artist	
ART 587 Intro to 3D Modeling & Rapid Prototyping	
ART 590 Methods for Digital Output	
ART 592 Advanced Kiln Procedures & Construction	
ART 672 Written Thesis Preparation	4
ART 680 Thesis* (credits per semester, 2 nd Year)	8-12
ARTH 5XX Ceramics History Seminar	4
ARTH 660 First Year Graduate Seminar	2
Minimum Total Credit Hours Required	60

Electronic Integrated Arts

ART or ARTH 500 or higher level Electives* (outside major concentration)	4
May include ART 501, 550, 500, 535, 587, 590, 601, or other graduate level courses approved by advisor.	
ART 523 Work and Analysis	16
ART 524 Electronic Strategies (non-time based)	2
ART 525 Advanced Electronic Arts*	16-20
ART 526 Electronic Strategies (time based)	2
ART 671 Written Thesis Preparation-EIA	4
ART 681 Thesis*	16-20
ART 660 First Year Graduate Seminar	2
ARTH minimum one Art History/Criticism course	4
Minimum Total Credit Hours Required	60

Painting

ART or ARTH 500 or higher level Electives* (outside major concentration)	4
May include ART 501, 500, 535, 550, 587, 590, 601, or Other graduate courses approved by advisor.	
ART 540 Graduate Painting*	12-20
ART 542 Critique and Discussion	16
ART 544 Professional Practices	8
ART 674 Written Thesis Preparation-Painting	4
ART 683 Graduate Painting Thesis*	14-20
ART 660 First Year Graduate Seminar	2
ARTH minimum one Art History/Criticism course	4
Minimum Total Credit Hours Required	60

Sculpture/Dimensional Studies*Concentration in Glass Art and Sculpture*

ART or ARTH 500 or higher level Electives*

(outside major concentration) 8

May include ART 501, 550, 500, 535, 587, 590, 601, or other graduate level courses approved by advisor.

ART 522 Advanced Sculpture/Dimensional Studies*
(credits per semester, 1st Year) 8-12

ART 529 Studio Practice 6

ART 672 Written Thesis Preparation 4

ART 682 Thesis* (credits per semester, 2nd Year) 8-12

ARTH 561 Viewing Sculpture 4

ARTH 660 First Year Graduate Seminar 2

ARTH minimum one Art History/Criticism course 4

Minimum Total Credit Hours Required 60**College of Business****Master of Business Administration**

The 21st century business world will demand new things from business leaders: creativity, ethical behavior, a global mindset and a deep understanding of sustainable business practices.

The Alfred MBA prepares the next generation of business leaders by focusing on those factors that will lead to success. Students study real world, in-demand skills in courses such as Creativity and Innovative Thinking, and Negotiation and Persuasion, and courses that concentrate on sustainable business practices: Economics for Managers, Business Sustainability, and Ethics and Corporate Governance. The MBA Capstone offers a unique opportunity to work as a professional consulting team with regional businesses.

The **MBA-Business Administration** provides opportunities for students to focus electives in interest areas, including sustainable business and healthcare management. The **MBA-Accounting** builds on an existing accounting degree or substantial coursework to prepare for careers in the field of accounting and to meet coursework requirements for the Certified Public Accountant credential.

The Alfred MBA offers a number of courses through online and online hybrid instruction, while preserving the benefits of classroom instruction and interaction. This combination of course formats balances the needs of working adults for home study with the opportunity for peer engagement and group work that builds skills in leadership, teamwork, and connections with our faculty.

Mission and Values

The College of Business advances Alfred University's mission and goals in providing intellectual leadership through teaching, research and service. We provide active-learning driven educational programs in business management to interdisciplinary undergraduate and graduate students who value an intimate, interactive, student-centered learning environment. We develop our students into ethical business leaders who can think critically and communicate effectively in both domestic and global arenas. Our faculty conducts discipline based, applied and instructional research that bridge the gap between business theory and practice.

In support of this mission, graduates of our MBA program will be able to:

- Lead creative teams which develop innovative strategies
- Demonstrate effective leadership and teamwork skills
- Integrate functional knowledge of business disciplines with sustainable business knowledge

- Use a global perspective in business decision making
- Understand and apply ethical business practices in business decisions

History and Accreditation

The College of Business was established at Alfred University in 1973 and has been accredited by AACSB since 1987. The MBA degree program is accredited by the Association to Advance Collegiate Schools of Business (AACSB) - International. The School is located in the F.W. Olin Building, a \$5.6 million facility providing classroom computer facilities and a stock trading room. MBA students have access to a graduate lounge and computer workroom.

Business Administration Track

Graduates of the Alfred MBA-Business Administration track are prepared to enter management roles in a variety of business settings, and to ethically lead, inspire, and be an agent of change in the fast paced business world of the 21st century. The MBA prepares students with the knowledge and skills increasingly viewed as critical for business success, especially the growing need for knowledge of sustainability practices in MBA education.

The MBA curriculum has three components: undergraduate-level foundation courses, graduate business core courses, and graduate electives. The 18 credits of foundation courses introduce the functional areas of business practice. These courses are completed at the undergraduate level prior to starting the program, or as part of the program. Typically, students who have an undergraduate major or minor in a business field have already completed foundation requirements and may be able to complete the graduate courses (core and electives) in one year of full-time study. Students without prior foundation courses can be accepted into the MBA program and begin the program by taking foundation courses prior to moving into the graduate coursework.

Foundation Courses (Undergraduate Pre-requisites):**Total: 18 credits**

Business Statistics	3
Organizational Behavior	3
Marketing Principles	3
Managerial Finance	3
Financial Accounting	3
Operations Management	3

Foundation course requirements can be filled in the following ways:

- Undergraduate business degree (major or minor)
- Undergraduate courses at Alfred University
- Undergraduate business courses from accredited universities
- Online business foundations courses from Open SUNY
- Approved MOOCs (Stanford, MIT etc.) with completion certificates
- The student may also test out of the course requirement through arrangements with AU faculty members to demonstrate mastery of foundation knowledge

The graduate courses for the MBA-Business Administration consist of the Graduate Core and Electives. The core courses impart knowledge and skills increasingly viewed by employers as critical for business success. These courses focus on professional skills which build a sustainable workforce and which sustain businesses into the future. The MBA capstone course provides an advanced professional experience integrating management skills through team

consultation with business clients to produce innovative solutions to business questions.

MBA Graduate Core:		Total: 19 credits
MBA 626	Innovation Management	3
MBA 630	Management for Global Leaders	3
MBA 651	Economics for Managers	3
MBA 652	Negotiation & Persuasion (A Block)	2
MBA 661	Creativity & Innovative Thinking (B Block)	2
MBA 674	Business Analytics	3
MBA 699	Business Consulting Capstone	3

The elective course offerings for the MBA-Business Administration provide the opportunity to deepen knowledge of business sustainability, and to explore other areas of interest. Students can select from among the elective offerings to build a focus area in Sustainable Business, Leadership, or Health Planning and Management. Faculty-led study trips are among the elective choices.

MBA Business Administration Electives Total: 12 credits		
MBA 600	Seminars (topics vary)	3
MBA 605	German Auto Industry	3
MBA 610	Leadership Dynamics	3
MBA 614	Corporate Finance	3
MBA 635	US Healthcare Business and Policy	3
MBA 654	Business Ethics & Corporate Responsibility	3
MBA 681	Business Sustainability	3

MBA Accounting Track

The MBA-Accounting track prepares those individuals with an undergraduate degree in accounting for various careers in the accounting field, including public accounting, corporate, and government positions. The program builds on the MBA foundation and core skills while offering advanced training in accounting topics and applied skills.

The MBA-Accounting program is registered with the NYS Department of Education as meeting the 150-credit hour educational requirements for Certified Public Accountant (CPA). Graduates of the MBA-Accounting program are prepared to enter professional roles in the public accounting, corporate, and government sectors.

The curriculum parallels the MBA-Business Administration track's foundation courses and graduate business core courses, but requires three advanced accounting core courses, and one elective option. Students who graduate from the Alfred University College of Business with an accounting major will have completed the prerequisite undergraduate coursework permitting them to complete all MBA-Accounting requirements with 31 credit hours of graduate study. A review of transcripts will be required to determine the content/length of program for applicants who have completed a baccalaureate degree at institutions other than Alfred University, as additional undergraduate courses may be required.

MBA Foundation Courses

(Undergraduate Pre-requisites):		Total: 18 credits
	Business Statistics	3
	Organizational Behavior	3
	Marketing	3
	Managerial Finance	3
	Financial Accounting	3
	Operations Management	3

Accounting Foundation Courses:		Total: 21 credits
	Managerial Accounting	3

Intermediate Accounting I	3
Intermediate Accounting II	3
Cost Accounting	3
Personal Income Tax	3
Corporate Taxation	3
Auditing	3

Foundation course requirements can be filled in the following ways:

- Undergraduate business degree (major or minor)
- Undergraduate courses at Alfred University
- Undergraduate business courses from accredited universities
- Online business foundations courses from Open SUNY
- Approved MOOCs (Stanford, MIT etc.)
- The student may also test out of the course requirement through arrangements with AU faculty members to demonstrate mastery of foundation knowledge

The graduate core courses for the MBA - Accounting Track are identical to those required for the MBA - Business Administration Track. These core courses impart knowledge and skills increasingly viewed by employers as critical for business success. These courses focus on professional skills which build a sustainable workforce and which sustain businesses into the future. The MBA capstone course provides an advanced professional experience integrating management skills through team consultation with business clients to produce innovative solutions to business questions.

MBA Graduate Core:		Total: 19 credits
MBA 626	Innovation Management	3
MBA 630	Management for Global Leaders	3
MBA 651	Economics for Managers	3
MBA 652	Negotiation & Persuasion (A Block)	2
MBA 661	Creativity & Innovative Thinking (B Block)	2
MBA 674	Business Analytics	3
MBA 699	Business Consulting Capstone	3

Advanced Graduate Accounting Courses: Total: 9 credits		
MBA 653	Accounting Theory	3
MBA 655	Advanced Topics in Auditing	3
MBA 657	Advanced Taxation	3

Students in the MBA-Accounting Track select one open graduate elective to complete their required coursework. The electives provide the opportunity to deepen knowledge of business sustainability, and to explore other areas of interest. Faculty-led study trips are among the elective choices.

MBA Business Administration Elective Choices: 3 credits		
MBA 600	Seminars (topics vary)	3
MBA 605	German Auto Industry	3
MBA 614	Corporate Finance	3
MBA 635	US Healthcare Business and Policy	3
MBA 654	Business Ethics & Corporate Responsibility	3
MBA 681	Business Sustainability	3

Full and Part-Time Study

Students may attend the MBA program on a part-time or full-time basis. Full-time is defined as 12-18 credits per semester. The MBA program is designed so that full-time students who have met foundations requirements can complete the 31 credits of graduate coursework in one academic year. Full-time students who need to complete undergraduate foundation courses will require up to 49 credits (18 credits of foundations + 31 graduate MBA credits), depending on their undergraduate preparation. Typical schedules for full-time students are shown below.

Fall Semester-Business Administration Track 15 credits

MBA 626	Innovation Management	3
MBA 630	Management for Global Leaders	3
MBA 651	Economics for Managers	3
MBA	elective	3
MBA	elective	3

Spring Semester-Business Administration Track 16 credits

MBA 652	Negotiation & Persuasion (A Block)	2
MBA 661	Creativity & Innovative Thinking (B Block)	2
MBA 674	Business Analytics	3
MBA 699	Business Consulting Capstone	3
MBA	elective	3
MBA	elective	3

Fall Semester – Accounting Track 15 credits

MBA 626	Innovation Management	3
MBA 630	Management for Global Leaders	3
MBA 655	Advanced Topics in Auditing	3
MBA 651	Economics for Managers	3
MBA	elective	3

Spring Semester – Accounting Track 16 credits

MBA 652	Negotiation & Persuasion (A Block)	2
MBA 653	Accounting Theory	3
MBA 657	Advanced Taxation	3
MBA 661	Creativity & Innovative Thinking (B Block)	2
MBA 674	Business Analytics	3
MBA 699	Business Consulting Capstone	3

Part-time students can finish the 31 credit-hour program in a minimum of four semesters. Many courses are offered during summer and winter (Allen) term, which provides additional flexibility. Many MBA classes are offered in a low residency format, with a combination of online, hybrid online and some courses with weekend intensive instruction. Part-time students whose program of study requires more than 31 credit hours to complete undergraduate foundations will need more time to complete the degree requirements. Students may begin part-time study without formal application to the program, but can complete a maximum of 12 credit hours as a non-matriculated student.

GPA Requirements

The academic standards for graduate students at Alfred University require an overall cumulative average of 3.0 to meet graduation requirements. MBA students are permitted no more than 3 graduate credits below a grade of B. Failure to maintain these standards could result in dismissal from the program.

Admissions

Admission to the MBA program for both part and full-time students requires the following application materials:

1. Official undergraduate transcripts.
2. Two letters of recommendation from either employers or college professors, whichever is appropriate. This is not required of AU College of Business graduates. Forms are available through the Office of Graduate Admissions, or on-line, for your convenience.
3. Personal statement of graduate educational objectives
4. Resume
5. Graduate Management Admissions Test. The GMAT is not required for MBA application. The GMAT may be required for applicants whose profile needs supplemental information to establish their readiness for graduate study in business.

6. Submit application and above items, along with the application fee (waived for current AU students or alumni), to:
Office of Graduate Admissions
Alumni Hall
Saxon Drive
Alfred, NY 14802
(607) 871-2141

4+1 MBA Program

Students who complete the Business Administration minor at Alfred University will have fulfilled the undergraduate foundation requirements for the MBA. Completion of the 4+1 undergraduate coursework does not guarantee admittance into the MBA program, as students must still apply and be accepted into the program.

Assistantships and Financial Aid

Graduate assistantships are granted annually to full-time MBA students. Most graduate assistants work 7.5 hours per week with a business faculty member or professional staff member in their area of interest, and provide for remission of one-half the annual graduate tuition.

Assistantship assignments may involve supporting faculty in teaching or research, working with college administrators on data analysis or student support functions, or assisting in the University's business and finance office.

Assistantships are also available through the Division of Student Affairs, and may involve working with the residence life or athletics programs. These assistantship options require additional hours of service, and provide enhanced financial benefits. Athletics assistantships limit students to part-time enrollment.

Career Services

The University Career Development Center (CDC) works closely with MBA students both during and after graduation to secure employment in their chosen field. The CDC provides individual career assistance such as resume and cover letter writing, electronic job searching, effective interviewing, salary negotiation and provides a medium to network with alumni.

Kazuo Inamori School of Engineering**Graduate Programs in Engineering and Science**

There are six engineering and science programs leading to the conferral of the Master of Science degree:

- Biomaterials Engineering
- Ceramic Engineering
- Electrical Engineering
- Glass Science
- Materials Science and Engineering
- Mechanical Engineering

Biomaterials Engineering**Overview**

Biomaterials Engineering (BME) at Alfred University is an interdisciplinary program that focuses on both the intrinsic properties of biomaterials and the interaction between these nonliving biomaterials and the biological systems with which they must interact. Tailored ceramics, glass, metals, composites, and polymers are assuming greater importance for implants, drug delivery substrates, radioactive delivery vehicles for cancer therapy, substrates for cell culture,

catalysts for biological reactions, immobilizers of harmful molecular species, materials for batteries, capacitors and other implant devices.

The BME program at Alfred University seeks to educate a unique group of biomedical engineers whose focus is on materials and their interactions with cells and tissues. The program is designed to attract students from diverse backgrounds such as materials engineering, biotechnology, biomedical, and physical sciences who wish to study materials for medical applications.

The curriculum and thesis-based research focuses on: (a) an understanding of the interaction/interface between nonliving materials and biological systems via fabrication, characterization, and simulation; (b) the development of novel biomaterials, including biomimetic, bioactive, and combination systems that utilize both living and nonliving components, (c) identification of new ways in which standard and novel biomaterials may be used in the analysis, diagnosis, and treatment of diseases and injuries; and (d) the development of standardized testing procedures for assessing and predicting materials behavior in the biological environment.

Students completing the program are well prepared to enter the rapidly growing "biotech" industries where knowledge of both materials and molecular cell biology is rare. They are also prepared to enter industries that develop and manufacture medical devices, equipment and supplies including the design and production of classic biomedical implants such as cardiovascular stents and dental prosthetics. They will be qualified for a wide range of careers in the healthcare industries.

A significant fraction of students may continue their education in professional schools of medicine or law, or pursue Ph.D. studies in related fields such as Materials Science or Biomedical Engineering.

Prerequisites and Undergraduate Preparation

The program is open to students holding Bachelor of Science degrees in materials engineering, biological, and physical sciences. Acceptance into the program is based on the applicant's prior academic record, work experience, potential for growth, and the availability of space in the program.

Ideally, applicants should present evidence of undergraduate-level competence in the following subject areas: 1) introductory cell biology, 2) organic chemistry, 3) thermal and mechanical properties of materials, and 4) single-variable calculus. Applicants without the required background will also be considered for admission, but may have to take pre-requisite courses before enrolling specific graduate classes.

Curriculum

The Master of Science in BME requires a minimum of thirty semester-hours of graduate credit, of which at least twenty-four must be in advanced coursework. Candidates for the degree are required (1) to present and defend a written thesis of their research and (2) to submit a manuscript suitable for publication in a peer-reviewed journal. The curriculum is designed to be completed in two years of full-time study.

Course Requirements

CEMS 568	Biomedical Materials	3
CEMS 569	Adv Biomedical Materials Engineering	3
List A	Technical Electives	9
List B	Technical Electives	8

CEMS 680	Graduate Thesis	6
ENGR 660	Research Seminar	1
ENGR 690	Graduate Seminar (mandatory each sem.)	0
Total Credit Hours Required for the Program		30

List A Technical Electives (Materials)

CEMS 505	Defects and Defect-related Process	3
CEMS 513	Nano-Structured Materials	3
CEMS 526	Surface Properties of Glass	3
CEMS 533	Statistical Experimental Design	3
CEMS 534	Polymer Characterization	3
CEMS 536	Physical and Mechanical Metallurgy	3
CEMS 538	Surfaces and Interfaces	3
CEMS 541	Advanced Crystallography	3
CEMS 542	Advanced Optical Microscopy	3
CEMS 543	Analytical Transmission Electron Micros	3
CEMS 567	Electrochemistry and Bioelectrochemistry	3

List B Technical Electives (Molecular and Cell Biology)

CEMS 563	Advanced Cell Biology	4
CEMS 564	Biochemistry: Proteins and Metabolism	4
CEMS 565	Biochemistry: Nucleic Acids	4

Ceramic Engineering

Overview

Ceramic Engineering is concerned with developing and manufacturing ceramic products, materials, and processes. Often characterized as "high temperature chemistry," ceramic engineering relies heavily on chemistry and physics of the solid state to measure and control the composition, structure, properties and performance of oxide and non-oxide materials. Processing, beginning with mining and raw material preparation, and including forming, drying, firing, decorating and quality assurance, lies at the heart of ceramic materials development and manufacture.

Ceramic materials are used in a wide range of extreme environments where their unique chemical, thermal, optical, electrical, magnetic, and mechanical properties lead to superior performance where other materials cannot survive.

Refractory ceramics provide the thermal envelop for the manufacture of metals and glasses and for power generation, both conventional and nuclear. Magnetic ceramics power dozens of motors in aircraft, cars and trucks and home appliances. Arguably, the "computer revolution" depends on the electrical and, more recently, the optical properties of ceramic materials, including glass.

Ceramic products range from familiar products that we all use every day to very advanced products used in transportation, medicine, national defense, communications, and computing. Everyday products include ceramic floor, wall and roof tiles, dinnerware, sanitary ware, electrical insulators for power transmission, cement and concrete for construction and transportation systems, glass products including flat glass (windows and architectural glasses), fiber glass insulation, TV glass for both the face and the "bulb" of TV tubes, and tableware. And the list goes on. Advanced ceramic products include glass fibers and active optical devices for communication, body armor for military and police, prosthetic devices for body part replacement, and high temperature materials for current and next-generation air and spacecraft.

The M.S. Ceramic Engineering program at Alfred University seeks to provide students with practical, hands-on learning that is founded on the science of the solid state. Students gain experience using state-of-the-art processing, characterization, and property measurement equipment and instrumentation as

tools aimed at solving real-world ceramic materials problems, often with industrial partners and mentors.

While it is true that many of our M.S. Ceramic Engineering graduates go on to pursue Ph.D. and other advanced professional degrees, our program is primarily designed for the student who recognizes that study beyond an engineering B.S. degree will be of great benefit to employment and success in the ceramics industries.

Graduates of the M.S. Ceramic Engineering program are well prepared for careers in the full range of ceramics industries, but thesis research will have focused attention and provided depth in a subset of opportunities of special interest to the student.

Some graduates of the program continue their education by pursuing doctoral degrees in Ceramics and related technical fields, or in a broad range of professional degrees, including medicine, law, and business.

Prerequisites and Undergraduate Preparation

The program is open to qualified students holding Bachelor of Science degrees in an ABET accredited engineering program. Acceptance into the program is based on the applicant's prior academic record, work experience, potential for growth, and the availability of space in the program. Ideally, applicants should present evidence of undergraduate-level competence in the following subject areas: 1) glass science, 2) ceramic processing, 3) thermal and mechanical properties of materials, and 4) electrical and optical properties of materials. Applicants without the required background will also be considered for admission, but may have to take pre-requisite courses before enrolling specific graduate classes.

Curriculum

The Master of Science in Ceramic Engineering requires a minimum of thirty semester-hours of graduate credit of which at least fifteen must be in advanced coursework.

The degree also requires a minimum of fourteen hours of thesis credit and a one-credit research seminar, which is taken during the first semester of graduate enrollment.

Candidates for the degree are required (1) to present and defend a written thesis of their research and (2) to submit a manuscript suitable for publication in a peer-reviewed journal. The curriculum is designed to be completed in two years of full-time study.

Course Requirements

CEMS 510	Advanced Ceramic Processing	
or CEMS 511	Science of Whitewares	3
	Characterization Elective	3
	Technical Electives	9
CEMS 680	Graduate Thesis (14 credit minimum)	14
ENGR 660	Research Seminar	1
ENGR 690	Graduate Seminar	
	(mandatory each semester)	0
Total Credit Hours Required for the Program		30

Characterization Elective

CEMS 541	Advanced Crystallography	3
CEMS 542	Advanced Optical Microscopy	3
CEMS 543	Analytical Transmission Electron Micros	3
CEMS 544	Structure and Characterization of Glasses	3
CEMS 545	Characterization in Materials Science and Engineering	3

Technical Electives

A technical elective in Ceramic Engineering is any graduate-level course in the School of Engineering *except* CEMS 519. Graduate-level courses offered in Chemistry, Physics or Mathematics may be used as technical electives with written approval of the thesis advisory committee.

Electrical Engineering

Overview

Electrical Engineering covers everything from power generation, transmission, distribution and utilization to microchip circuit design, control systems, communications systems, computer design, lasers, etc.

Electrical engineering covers computers, controls, communication, power, and electronic materials. Graduates of the M.S. in E.E. program will pursue Ph.D., J.D., and M.D. degrees, or will enter the job market in the areas of electrical engineering, general engineering, management, research and development, teaching or other related profession.

The mission of the Electrical Engineering Graduate Program is to provide excellent learning opportunities for individual graduate students in our specialized areas, with a required research thesis or design project. At Alfred University, the Master of Science degree in Electrical Engineering seeks enable student to specialize in the following areas:

- Control systems
- Computer systems and software
- Optoelectronic and solid-state devices
- Power systems and machinery
- Electromagnetic waves & high voltage devices
- Renewable Energy Systems

Graduates of the program are well prepared to work in research and development, technical sales, product design, manufacturing, or management, just to name a few.

Prerequisites and Undergraduate Preparation

The program is designed for individuals with a Bachelor of degree from an approved institution in a field of engineering or physics. Students with degrees from non-accredited engineering programs will also be considered for admission, but may have to take one or more course pre-requisites prior to enrolling in specific graduate credit courses. Acceptance is based on the candidate's prior academic record, work experience, potential for growth, and the availability of space in the program.

Curriculum

The M.S. degree in Electrical Engineering requires a minimum of 30 semester hours of graduate credit, of which at least 5 classes must be in advanced course work. The selected elective courses must form a coherent plan of in-depth study and should be selected in consultation with the student's advisor/thesis committee. A thesis or project is required of each candidate of the program. Candidates enrolled in full-time studies are required (1) to present and defend a written thesis of their research and (2) to submit a manuscript suitable for publication in a peer-reviewed journal. Candidates enrolled in part-time study are required to complete an engineering project, representing three semester-hours of credit, and to submit a written technical report.

For full-time students, the degree requirements must be completed within three years first enrolling as a graduate student at AU. For part-time students, this time limit is extended to six years.

Course Requirements (Thesis Option)

Technical Electives	12-20 Math Elective
ELEC 680 Graduate Thesis	6-14
ENGR 690 Graduate Seminar (mandatory each sem.)	0

Total Credit Hours Required for the Program 30

Course Requirements (Project Option)

Technical Electives	23
Math Elective	4
ELEC 699 Master's Project	3

Total Credit Hours Required for the Program 30

Technical Electives

A technical elective in Electrical Engineering is any graduate-level course with the ELEC designation. Up to two graduate-level courses offered in the School of Engineering, Chemistry, and Physics may also be used as technical electives with written approval of the student's advisor and thesis committee.

Mathematics Electives

Select ELEC 588 or CEMS 506	
ELEC 588 Applied Complex Variables	4
CEMS 506 Advanced Engineering Mathematics	4

Glass Science**Overview**

Glass Science (GS) involves the study of non-crystalline materials, which may be inorganic, organic, or metallic in nature. Glass scientists and engineers at the M.S. degree level are employed in positions ranging from research to development to plant operations. Many M.S. degree recipients quickly enter into management positions.

Glass science can be divided into the fields of consumer products, which includes flat and container glass, fiberglass, and glasses used to produce TV, CRT, PDA, and other electronic devices, and specialty glasses, which include optical fibers, photonic materials, glasses for electronic applications, biological applications of glasses, glasses for the isolation of radioactive waste materials, space technology, homeland security, and a host of other, continually evolving applications in the areas of advanced technology.

The Master of Science in Glass Science at Alfred University seeks to produce graduates who can immediately enter positions throughout industry and government laboratories or continue to a Ph.D. in glass, materials science, or biomaterials. Entering students should ideally have a B.S. degree in some area of materials science, physics, chemistry, or, if interested in biological applications of glass, biology. Students from other backgrounds will be considered, but may be required to take specific courses from our undergraduate program to correct deficiencies before beginning their graduate program. Students seeking a terminal M.S. degree should have a strong interest in the application of science to solving problems.

This program emphasizes "hands-on" studies, with a solid research experience through the thesis project. This approach provides a level of confidence in our graduates which is reflected in their ability to move into industrial positions with minimal adjustment time.

A terminal M.S. degree is particularly suited for those who desire an industrial position, with rapid advancement into managerial ranks, or for those with the desire to work in development facilities. Our graduates are also well prepared to continue to a Ph.D. in glass, materials science, or biomaterials.

Graduates of the program are well prepared for careers ranging from research and development to general plant operations.

Our graduates are employed at Corning, Inc., Owens-Corning, IBM, Naval Research Laboratory, the U.S. Patent Office, and a wide range of other facilities ranging from major corporations to national laboratories to small high technology companies at the cutting edge of materials technology. Many of our graduates make a rapid transition into managerial positions in industry. A significant number of our graduates continue their education by pursuing doctoral degrees in Glass and related fields, with many recent Ph.D. students particularly interested in optical and biological applications of glass.

Prerequisites and Undergraduate Preparation

The program is open to qualified students holding B.S. degrees in chemistry, physics, biology, and engineering programs in materials, ceramics, glass, polymers, or biomaterials. It is also possible for graduates in other engineering programs, e.g. EE, to qualify for admission. Ideally, applicants should present evidence of undergraduate-level competence in chemistry, physics, and math through differential equations, with some experience with materials science, including the mechanical, thermal, and electrical behavior of solids. Some knowledge of the structure of solids is also desirable. Applicants without the required background will also be considered for admission, but may have to take pre-requisite courses before enrolling specific graduate classes. Acceptance is based on the candidate's prior academic record, work experience, potential for growth, and the availability of space in the program.

Curriculum

The Master of Science in Glass Science requires a minimum of thirty semester-hours of graduate credit of which at least fifteen must be in advanced coursework. The degree also requires a minimum of fourteen hours of thesis credit and a one-credit research seminar, which is taken during the first semester of graduate enrollment.

Candidates for the degree are required (1) to present and defend a written thesis of their research and (2) to submit a manuscript suitable for publication in a peer-reviewed journal. The curriculum is designed to be completed in three semesters of full-time study.

Course Requirements

Glass Electives	6
Characterization Electives	3
Technical Electives	6
CEMS 680 Graduate Thesis (14 credit minimum)	14
ENGR 660 Research Seminar	1
ENGR 690 Graduate Seminar (mandatory each sem.)	0
Total Credit Hours Required for the Program	30

Glass Electives

CEMS 520 Optical Glasses	3
CEMS 521 Behavior of Glass-forming Melts	3
CEMS 522 Thermal Behavior of Glasses and Melts	3
CEMS 523 Structure of Glasses	3
CEMS 524 Mass Transport in Glasses and Melts	3
CEMS 525 Advanced Optical Behavior of Glasses	3
CEMS 526 Surface Properties of Glass	3
CEMS 544 Structure and Characterization of Glasses	3
CEMS 553 Mechanical Prop of Glasses & Ceramics	3
CEMS 555 Principles and Tech of Photonic Devices	3

Characterization Elective

CEMS 541	Advanced Crystallography	3
CEMS 542	Advanced Optical Microscopy	3
CEMS 543	Analytical Transmission Electron Micros	3
CEMS 544	Structure and Characterization of Glasses	3
CEMS 545	Characterization in Materials Science and Engineering	3

Materials Science and Engineering**Overview**

Material Science and Engineering (MSE) is concerned with the interrelationship among the structure, processing, properties, performance, and applications of materials, which includes ceramics, metals, polymers, and composites. MSE is an interdisciplinary field that combines aspects of chemistry, physics, mathematics, and engineering. Materials engineers provide “enabling technologies” for a wide range of industries including electronics, automotive, aerospace, medical, and more traditional manufacturing industries. Today, material science and engineering professionals are involved in developing improved fuel cells and hydrogen-storage devices for efficient energy production, designing lightweight and reliable materials for advanced aircraft and space vehicles, developing high temperature materials and coating for turbine applications, and devising remote sensors for detecting pathogens. Materials science and engineering also lies at the center of the nanotechnology revolution.

The Master of Science degree program in MSE at Alfred University seeks to provide students with a solid foundation in the fundamentals of material science while allowing them the flexibility to pursue advanced studies a focused area of their interest. The mission of the program is to prepare a graduate with both strong theoretical and “hands-on” laboratory skills.

A student in the MSE program can also use their choice of technical electives and thesis research topic to obtain a broad general materials background; or the student can specialize in a specific materials field (e.g. metals, ceramics, polymers, or composites processing) or a specific area of analysis and characterization (e.g. mechanical properties of materials, electrical properties of materials, X-ray analysis, spectroscopy, or electron microscopy).

Graduates of the program are well prepared for careers in industrial research and development, industrial process engineering, and research at national labs. Some graduates of the program continue their education by pursuing doctoral degrees in MSE and related fields. Others pursue professional degrees in business, law, and medicine.

Prerequisites and Undergraduate Preparation

The program is open to qualified students with Bachelor of Science degrees in engineering and the physical sciences. Students with a degree in another science or engineering field may have to take prerequisite undergraduate materials science and engineering courses before enrolling in specific graduate classes. Typically, the student and his or her advisor develop a plan of study at the start of the program based on the student's background and the student's research topic. Applicants without the required background will also be considered for admission, but acceptance is based on the candidate's prior academic record, work experience, potential for growth, and the availability of space in the program.

Curriculum

The Master of Science in Materials Science and Engineering (MS-MSE) requires a minimum of thirty semester-hours of

graduate credit of which at least fifteen must be in advanced coursework.

The degree also requires a minimum of fourteen hours of thesis credit and a one-credit research seminar, which is taken during the first semester of graduate enrollment. Candidates for the degree are required (1) to present and defend a written thesis of their research and (2) to submit a manuscript suitable for publication in a peer-reviewed journal. The curriculum is designed to be completed in three semesters of full-time study although students with other engineering or science backgrounds may require four semesters.

Course Requirements

CEMS 501	Solid State Physics	
or CEMS 503	Thermodynamics of Materials	3
CEMS 545	Characterization in Materials Science & Engineering	3
	Technical Electives	9
CEMS 680	Graduate Thesis (14 credit minimum)	14
ENGR 660	Research Seminar	1
ENGR 690	Graduate Seminar	
	(mandatory each semester)	0
Total Credit Hours Required for the Program		30

Technical Electives

A technical elective in the MS-MSE program is any graduate course in the School of Engineering *except* CEMS 519. Graduate-level courses offered in Chemistry, Physics or Math may be used as technical electives with written approval of the thesis advisory committee.

Mechanical Engineering**Overview**

Mechanical Engineering (ME) is one of the largest, broadest and oldest engineering disciplines. Mechanical engineers use the principles of energy, materials and mechanics to design and manufacture machines and devices of all kinds. Mechanical engineers also create the processes and systems that drive technology and industry. Mechanical engineers are often called the ‘general practitioners’ of engineering because of the broad scope of their education and the diversity of their professional opportunities. Due to its breadth, mechanical engineering is generally linked to the economy as a whole; job prospects are relatively immune to isolated economic events.

The field of ME is notable for emphasizing versatility. A mechanical engineering education is an excellent foundation for work in other fields. Versatility is an asset in a world that is undergoing constant economic, political, industrial and social change. Mechanical engineers are positioned, not only to adopt, but also to define and direct change.

The mission of the Mechanical Engineering program is to provide a superior student-centered engineering education within a small university environment. Our dedicated faculty places the highest value on the teaching-learning process, while also being active in professional, technical and scholarly activities. Graduates of our program will understand the social and ethical implications of their engineering decisions, and be prepared to excel in the engineering profession.

Prerequisites and Undergraduate Preparation

The program is designed for individuals with a Bachelor of Science degree from an ABET-accredited program in Mechanical Engineering. Students with bachelor's degrees in other engineering fields and the physical sciences or with

degrees from non-accredited engineering programs will also be considered for admission.

Those admitted may have to take one or more course prerequisites prior to enrolling in specific graduate credit courses. Acceptance is based on the individual's prior academic achievements and work experience, and upon the availability of space in the program.

Curriculum

The program leading to the M.S. degree in Mechanical Engineering requires a minimum of 30 semester hours of graduate credit, of which at least 24 credit hours must be in advanced course work. The selected elective courses must form a coherent plan of in-depth study and should be selected in consultation with the student's advisor/thesis committee. Candidates for the degree are required (1) to present and defend a written thesis of their research and (2) to submit a manuscript suitable for publication in a peer-reviewed journal. For full-time students, the degree requirements must be completed within three years of first enrolling as a graduate student at AU. For part-time students, this time limit is extended to six years.

Course Requirements (Thesis Option)

Technical Electives	24
MECH 680 Graduate Thesis	6
ENGR 690 Graduate Seminar (mandatory each semester)	0
Total Credit Hours Required for the Program	30

Course Requirements (Project Option)

Technical Electives	27
MECH 699 Master's Project	3
Total Credit Hours Required for the Program	30

Technical Electives

A technical elective in Mechanical Engineering is any graduate-level course with the MECH designation. Graduate-level courses offered in the School of Engineering, Chemistry, Physics, and Mathematics may also be used as technical electives with written approval of the student's advisor and thesis committee.

Doctor of Philosophy Degrees in Engineering and Science

The Inamori School of Engineering offers the Ph.D. in three fields:

- **Ceramics**
- **Glass Science**
- **Materials Science & Engineering**

The Ph.D. programs are open to qualified students holding Bachelor of Science and Master of Science degrees in the fields of science and engineering. Acceptance into the program is based on the applicant's prior academic record, previous work experience, potential for growth, and the availability of space in the program.

The Ph.D. degrees require ninety credit hours beyond the requirements for the baccalaureate degree. Of these, a minimum of thirty-three credit hours must be in regular course work; the remainder may be earned as thesis credits. There is also a two-year residency requirement.

All three programs require the following four core courses:

CEMS 503	Thermodynamics of Materials
CEMS 504	Kinetics and Non-equilibrium Processes in Materials

CEMS 501 Solid State Physics

CEMS 506 Advanced Engineering Math

All three programs also require successful completion of ENGR 660 - Research Seminar during the first semester, and attendance of ENGR 690 - Graduate Seminar during each semester in residence at Alfred University.

Additional course requirements in the Material Science and Engineering program include CEMS 502 - Quantum Physics, CEMS 505 - Defects and Defect-Related Processes, and CEMS -545 Characterization in Materials Science and Engineering. Students enrolled in the Glass Science program must complete fifteen credit hours of Glass courses work (CEMS 52X).

Students enrolled in the Ph.D. programs must pass a qualifying exam, usually within the first year of their enrollment.

Candidates for the degree must write, present and successfully defend a doctoral thesis based on independent and original research conducted by the student. Prior to displaying the thesis, candidates for the Ph.D. degree must present a minimum of three accepted peer-reviewed publications. Thirty credit hours in thesis work must be a recorded part of each student's program, and as many as fifty credit hours may be included, but the accumulation of these credits does not in itself imply the satisfaction of the requirement. The thesis must be acceptable for publication.

During the first semester, the student will select, with the approval of the Dean of Engineering, a faculty member of the School of Engineering to be his/her advisor. The advisor will then select at least three more members of the faculty, with due consideration of the specific research interest of the student, to form the Advisory Committee. This Committee will guide the student in course selections, thesis research, preparation for qualifying and final oral examinations, and, in general, care for the student's academic well-being.

School of Graduate and Continuing Studies

On-Campus Programs

College Student Development

The School of Graduate and Continuing Studies offers a graduate program in College Student Development, which prepares candidates to work in a variety of entry-level or mid-management student affairs positions, including those in academic, administrative, residential life, leadership, student activities, and other aspects of student life.

Master of Science in Education

M.S.Ed. in College Student Development:

Overview

The Graduate Program in College Student Development is designed to train knowledgeable and skilled counselors who are able to serve a culturally diverse society through professional employment in school, agency, and higher education settings. The program is committed to the personal and professional development of each student in the context of a sound theoretical background. One-on-one interaction between faculty members and students encourages the personal learning that is vital to the education of counselors. Students gain a strong knowledge base and they also develop personal maturity and strong interpersonal and organizational skills.

Mission Statement

Alfred University's graduate program in College Student Development prepares individuals for positions within higher education. Students acquire core knowledge and professional competencies that enable them to enter the profession.

We (the faculty) strive to create a rigorous scholarly and supportive atmosphere for students to develop intellectually with a deep sense of social consciousness and self-awareness. We value teaching, scholarship, and service, which contribute to the mission of Alfred University.

Goals of the M.S.Ed. Program in College Student Development

The goals of Alfred University's College Student Development program grow out of the program's mission and are:

- To prepare graduate students in the acquisition of a comprehensive and scholarly knowledge base relevant to the profession of student affairs and higher education.
- To prepare graduate students in the acquisition of professional knowledge, skills and abilities in the areas of leadership, social justice, and community building.
- To prepare graduate students to become competent, self-aware, and socially conscious in order to work in a variety of student affairs settings serving a diverse population.

The Curriculum

Alfred University's Master's Degree in College Student Development consists of 48 credit hours of coursework and supervised practicum and internship experiences, designed to meet ACPA and NASPA competencies. The program admits students for the fall semester, and full-time students are continuously enrolled for two academic years. The degree can also be completed on a part-time basis. Satisfactory performance and development as well as the satisfactory completion of a capstone project is a requirement for graduation from the program.

The course sequence for students in each of the tracks follows:

College Student Development Course Sequence (Full-time)

First Year Courses

Fall Semester

CSDV 601	Introduction to Student Affairs	3
COUN 642	Multicultural Counseling	3
COUN 606	Human Development: The Lifespan	3
COUN 636	Principles of Counseling	3
Semester Total Credit Hours		12

Spring Semester

CSDV 607	Foundations College Student Development	3
CSDV 617	Exceptionality: College Students with Disabilities	3
COUN 639	Group Counseling	3
CSDV 657	Practicum in College Student Development	3
Semester Total Credit Hours		12

Second Year Courses

Fall Semester

CSDV 668	Internship I	6
COUN 605	Career Development and Life Planning	3
COUN 671	Research and Statistics	3
Semester Total Credit Hours		12

Spring Semester

CSDV 670	Internship in College Student Development II	3
CSDV 674	Legal Issues in Student Affairs	3

COUN 695	Topics in Counseling	3
Semester Total Credit Hours		12

Total Credit Hours Required for the Program: 48

College Student Development Course Sequence (Part-time)

First Year Courses

Fall Semester

CSDV 601	Introduction to Student Affairs	3
COUN 606	Human Development: The Lifespan	3
COUN 636	Principles of Counseling	3
Semester Total Credit Hours		9

Spring Semester

CSDV 607	Foundations of College Student Development	3
CSDV 617	Exceptionality: College Students with Disabilities	3
COUN 639	Group Counseling	3
Semester Total Credit Hours		9

Second Year Courses

Fall Semester

COUN 642	Multicultural Counseling	3
COUN 605	Career Development and Life Planning	3
COUN 671	Research and Statistics	3
Semester Total Credit Hours		9

Spring Semester

CSDV 657	Practicum in College Student Development	3
CSDV 674	Legal Issues in Student Affairs	3
COUN 695	Topics in Counseling	3
Semester Total Credit Hours		9

Third Year Courses

Fall Semester

CSDV 668	Internship I	6
Semester Total Credit Hours		6

Spring Semester

CSDV 670	Internship II	6
Semester Total Credit Hours		6

Total Credit Hours Required for the Program: 48

Undergraduate Preparation for the M.S.Ed. Program in College Student Development

It is preferred that students present evidence of successful completion of some undergraduate course work in the following subject areas: Psychology, sociology, education, or human development. However, it is more important that students demonstrate academic success in their undergraduate work, no matter what the major.

Practical experiences are seen as valuable preparation, but cannot substitute for supervised graduate level practicum experiences. Up to 6 hours of graduate credit may be transferred to the master's degree.

College Student Development Program courses are open only to graduate students. Non-matriculated students who wish to take courses must obtain permission from the Division Chair. According to graduate school academic regulations, a maximum of 12 credits can be taken as a non-matriculated student.

Admission

Students applying to the College Student Development Program must submit the following documents directly to the Graduate Admissions Office:

- a completed application form;
- three (3) letters of recommendation;
- official transcripts of all undergraduate and graduate coursework;
- Graduate Record Examination (GRE) results-General Test; and
- a personal statement of objectives;

Admission to the MS.Ed. College Student Development Programs is limited to 18 students each year. Review of applications will begin on February 1. Early application is strongly encouraged.

Interview

An on-campus interview is expected of each applicant for admission to the program, but warranted exceptions may be made. Successful candidates will demonstrate adequate undergraduate preparation, as well as the maturity and self-awareness that are requisites skills for the profession of student affairs. Correspondence about the program should be addressed to Dr. Kevin Curtin, Program Director, College Student Development, Alfred University, Saxon Drive, Alfred, NY 14802. Telephone (607) 871-2212; e-mail: curtink@alfred.edu

School Counseling and Mental Health Counseling,

The Division of Counseling and School Psychology offers graduate programs to prepare candidates to become mental health professionals working in schools, community agencies, and higher education. Three degree programs are available:

Master of Science in Education

- M.S.Ed. and Certificate of Advanced Study (MSED/CAS) in Counseling;
- School Counseling & Mental Health Counseling

Counseling Program

Overview

The Graduate Program in Counseling is designed to train knowledgeable and skilled counselors who are able to serve a culturally diverse society through professional employment in school, agency, and higher education settings. The program is committed to the personal and professional development of each student in the context of a sound theoretical background. One-on-one interaction between faculty members and students encourages the personal learning that is vital to the education of counselors. Students gain a strong knowledge base and they also develop personal maturity and strong interpersonal and organizational skills.

Mission Statement

Alfred University's graduate program in counseling prepares individuals for counseling positions in elementary, middle and high schools, mental health agencies, and colleges and universities. Students acquire core knowledge and clinical skills that enable them to enter the profession of counseling.

We (the faculty) strive to create a rigorous scholarly and supportive atmosphere for students to develop intellectually with a deep sense of social consciousness and self-awareness. We value teaching, scholarship, and service, which contribute to the mission of Alfred University.

Goals and Objectives of the M.S.Ed. Program in Counseling

Goal A: To prepare counseling students in the acquisition of a comprehensive and scholarly knowledge base relevant to the profession of counseling.

Objective A: Students will demonstrate knowledge in each of the eight core curricular areas:

- Professional Orientation/Ethics
- Social/Cultural Diversity
- Human Development
- Career Development
- Helping Relationships
- Group Work
- Assessment
- Research/Program Evaluation

Goal B: To prepare counseling students in the acquisition of professional knowledge, clinical skills and abilities in the areas of individual, group, and family interventions.

Objective B1: Mental health counseling students will demonstrate professional knowledge, skills, and practices necessary to address a wide variety of circumstances within the clinical mental health counseling context.

Objective B2: School counseling students will demonstrate professional knowledge, skills, and practices necessary to promote the academic, career, and personal/social development of all K-12 students.

Goal C: To prepare counseling students to become competent, self-aware, and socially conscious in order to work in a variety of settings serving a diverse population.

Objective C: Students will engage in personal and professional growth experiences that will allow them to assess their academic progress, personal and professional development skills, self-understanding, interpersonal effectiveness, and commitment and readiness to enter the counseling field.

The Curriculum

The Mental Health Counseling program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The program consists of 60 credit hours of coursework and supervised practicum/internship experiences leading to a Master of Science in Education and a Certificate of Advanced Study. Students gain applied experiences in the Child and Family Services Center on campus, as well as in various mental health agencies in the community. The mental health program is registered as a Licensure Qualified Program in New York State and satisfies all the educational requirements for students to become Licensed Mental Health Counselors (LMHC).

The School Counseling program is accredited by the Council for Accreditation of Counseling and Related Educational Programs (CACREP). The program consists of 60 credit hours of coursework and supervised practicum/internship experiences in schools leading to a Master of Science in Education and a Certificate of Advanced Study. Students specializing in school counseling will receive provisional certification as a New York State school counselor upon completion of the program, and have all coursework completed for permanent certification requirements.

The program admits students for the fall semester, and full-time students are continuously enrolled for two academic years. The degree can also be completed on a part-time basis. Satisfactory performance and development during the first two semesters as well as the satisfactory completion of a qualifying examination is a requirement for continuation in the program.

The course sequence for students in each of the tracks follows:

School Counseling Track Course Sequence (Full-time)

First Year Courses

Fall Semester

COUN 602	Professional/Ethical Found of Counseling	3
COUN 606	Human Development: The Lifespan	3
COUN 636	Principles of Counseling	3
COUN 642	Multicultural Counseling	3
COUN 605	Career Development and Life Planning	3
Semester Total Credit Hours		15

Spring Semester

COUN 604	Foundations of School Counseling	3
COUN 639	Group Counseling	3
COUN 616	Mental Health, Exceptionality, and Disability	3
COUN 638	Advanced Counseling Theory and Practice	3
COUN 657	Practicum in Counseling I	3
Semester Total Credit Hours		15

Second Year Courses

Fall Semester

COUN 626	Assessment in Counseling	3
COUN 671	Research and Statistics	3
COUN 668	Internship in School Counseling I	6
PSYC 641	Introduction to Family Therapy	3
COUN 646	Consultation and Prevention	3
Semester Total Credit Hours		18

Spring Semester

COUN 670	Internship in School Counseling II	
COUN 649	Evidence-Based Interventions in Schools	3
COUN 695	Topics in Counseling	3
Semester Total Credit Hours		12

Total Credit Hours Required for the Program: 60

Mental Health Track Course Sequence (Full-time)

First Year Courses

Fall Semester

COUN 602	Professional/Ethical Found of Counseling	3
COUN 606	Human Development: The Lifespan	3
COUN 636	Principles of Counseling	3
COUN 642	Multicultural Counseling	3
COUN 605	Career Development and Life Planning	3
Semester Total Credit Hours		15

Spring Semester

COUN 603	Foundations of Mental Health Counseling	3
COUN 639	Group Counseling	3
COUN 615	Psychopathology and Differential Diagnosis	3
COUN 638	Advanced Counseling Theory and Practice	3
COUN 657	Practicum in Counseling I	3
Semester Total Credit Hours		15

Second Year Courses

Fall Semester

COUN 626	Assessment in Counseling	3
COUN 671	Research and Statistics	3
COUN 641	Counseling Special Populations	3
COUN 663	Internship in Mental Health Counseling I	6
PSYC 641	Introduction to Family Therapy	3
Semester Total Credit Hours		18

Spring Semester

COUN 628	Assessment in Mental Health Counseling	3
COUN 664	Internship in Mental Health Counseling II	6
COUN 695	Topics in Counseling	3
Semester Total Credit Hours		12

Total Credit Hours Required for the Program: 60

School Counseling Track Course Sequence (Part-time)

First Year Courses

Fall Semester

COUN 602	Professional/Ethical Found of Counseling	3
COUN 606	Human Development: The Lifespan	3
COUN 636	Principles of Counseling	3
Semester Total Credit Hours		9

Spring Semester

COUN 639	Group Counseling	3
COUN 616	Mental Health, Exceptionality, & Disability	3
COUN 638	Advanced Counseling Theory and Practice	3
Semester Total Credit Hours		9

Second Year Courses

Fall Semester

COUN 642	Multicultural Counseling	3
COUN 671	Research and Statistics I	3
COUN 605	Career Development and Life Planning	3
Semester Total Credit Hours		9

Spring Semester

COUN 657	Practicum in Counseling I	3
COUN 604	Foundations of School Counseling	3
COUN 695	Topics in Counseling	3
Semester Total Credit Hours		9

Summer Courses (between year two and year three)

COUN 626	Assessment in Counseling	3
PSYC 641	Introduction to Family Therapy	3
Summer Total Credit Hours		6

Third Year Courses

Fall Semester

COUN 668	Internship in School Counseling I	6
COUN 646	Consultation and Prevention	3
Semester Total Credit Hours		9

Spring Semester

COUN 670	Internship in School Counseling II	6
COUN 649	Evidence-Based Interventions in Schools	3
Semester Total Credit Hours		9
Total Credit Hours Required for the Program:		60

Mental Health Counseling Track Course Sequence (Part-time)

First Year Courses

Fall Semester

COUN 602	Professional/Ethical Found of Counseling	3
COUN 606	Human Development: The Lifespan	3
COUN 636	Principles of Counseling	3
Semester Total Credit Hours		9

Spring Semester

COUN 639	Group Counseling	3
COUN 615	Psychopathology and Differential Diagnosis	3
COUN 638	Advanced Counseling Theory and Practice	3
Semester Total Credit Hours		9

Second Year Courses

Fall Semester

COUN 642	Multicultural Counseling	3
COUN 671	Research and Statistics I	3
COUN 605	Career Development and Life Planning	3
Semester Total Credit Hours		9

Spring Semester

COUN 657	Practicum in Counseling I	3
COUN 603	Foundations of Mental Health Counseling	3
COUN 695	Topics in Counseling	3
Semester Total Credit Hours		9

Summer Courses (between year two and year three)

COUN 626	Assessment in Counseling	3
PSYC 641	Introduction to Family Therapy	3
Summer Total Credit Hours		6

Third Year Courses*Fall Semester*

COUN 663	Internship in Mental Health Counseling I	6
COUN 641	Counseling Special Populations	3
Semester Total Credit Hours		9

Spring Semester

COUN 664	Internship in Mental Health Counseling II	6
COUN 628	Assessment in Mental Health Counseling	3
Semester Total Credit Hours		9

Total Credit Hours Required for the Program: 60

Undergraduate Preparation for the M.S.Ed./C.A.S. Program in Counseling

It is preferred that students present evidence of successful completion of some undergraduate course work in the following subject areas:
Psychology, sociology, education, or human development. However, it is more important that students demonstrate academic success in their undergraduate work, no matter what the major.

Practical experiences are seen as valuable preparation, but cannot substitute for supervised graduate level practicum experiences. Up to 6 hours of graduate credit may be transferred to the master's degree.

Counseling Program courses are open *only* to graduate students. Non-matriculated students who wish to take courses must obtain permission from the Division Chair. According to graduate school academic regulations, a maximum of 12 credits can be taken as a non-matriculated student.

Admission

Students applying to the Counseling Program must submit the following documents directly to the Graduate Admissions Office:

- a completed application form;
- three (3) letters of recommendation;
- official transcripts of all undergraduate and graduate coursework;
- Graduate Record Examination (GRE) results-General Test; and
- a personal statement of objectives;

Admission to the MS.Ed./C.A.S. Counseling Programs is limited to 18 students each year. Review of applications will begin on February 1. Early application is strongly encouraged.

Interview

An on-campus interview is expected of each applicant for admission to the program, but warranted exceptions may be made. Successful candidates will demonstrate adequate undergraduate preparation, as well as the maturity and self-awareness that are requisite skills for the profession of counseling. Correspondence about the program should be addressed to Dr. Kevin Curtin, Division of Counseling and School Psychology, Alfred University, Saxon Drive, Alfred, NY 14802. Telephone (607) 871-2212; e-mail: curtink@alfred.edu.

Master of Arts/Certificate of Advanced Study (MA/CAS) in School Psychology**Doctor of Psychology (Psy.D.) Degree in School Psychology****The M.A./C.A.S. Program in School Psychology****Overview**

School of Graduate and Continuing Studies offers a National Association of School Psychologists (NASP) approved program of graduate study in School Psychology consisting of two years of full-time graduate study followed by a full year internship. The Master's degree is conferred following completion of 61 credit hours of coursework, and the Certificate of Advanced Study is awarded upon completion of the 18 credits of full-time internship. These degree requirements satisfy the academic portion of the New York State Education Department requirements for the provisional certificate as a school psychologist. Graduates also fulfill the academic requirements for National Certification as a School Psychologist (NCSP), an additional credential offered by the National Association of School Psychologists. All students are required to take the School Psychology examination offered by the Educational Testing Service/Praxis Exam Series prior to completion of the internship.

The School Psychology Program is designed to develop professional psychologists who possess the personal characteristics and academic competencies necessary for serving the mental health and educational needs of all children and youth.

Because of the applied nature of the program and the close interpersonal relationships that the profession of school psychology demands, students applying for admission must demonstrate a high level of maturity, independence, and flexibility.

Mission of the MA/CAS Program

Preparation of school psychologists for applied professional practice in schools and related child and family settings.

Goals and Objectives of the MA/CAS Program

Goal A: To produce school psychologists with the personal qualities, interpersonal skills and awareness, and the ethical sensitivity predictive of success in a broad array of social, economic, and political contexts.

Objective A1: Students will develop an understanding of service delivery programs within a context respectful and appreciative of individual, family, and cultural diversity.

Objective A2: Students will develop an awareness that their personal characteristics and interpersonal skills affect the quality, social validity, and acceptability of the services they provide.

Objective A3: Students will abide by ethical standards as they relate to the historical foundations of the school psychology profession and the current guidelines for practice.

Goal B: To produce school psychologists competent to access a broad range of theoretical and practical approaches with sufficient depth to be effective, flexible practitioners.

Objective B1: Students will develop proficiency in data-based decision-making, including traditional and alternative approaches to the assessment and evaluation of children's academic, behavioral and emotional problems.

Objective B2: Students will develop proficiency in the design and development of programs to intervene both directly and indirectly with children's academic, behavioral, and emotional problems. These programs will include academic strategies, behavior modification, crisis

intervention, and counseling techniques that are implemented in a timely manner.

Goal C: To produce school psychologists who have an understanding of the basic principles of human cognitive and emotional development and their relationship to the functioning of children within a school setting.

Objective C1: Students will develop an understanding of the development of both normal and exceptional children.

Objective C2: Students will gain knowledge of general and special education services and legal guidelines, as part of understanding the educational and socio-political climate of their school districts.

Objective C3: Students will develop skills in consulting and communicating with school professionals and parents.

Objective C4: Students will develop skills in the prevention and remediation of academic and emotional problems in children.

Goal D: To produce school psychologists competent in the comprehension and application of research to professional practice.

Objective D1: Students will acquire a foundation in the scientific knowledge base of psychology and education, as well as an ability to evaluate and utilize research in their practice.

Objective D2: Students will develop proficiency in ongoing program evaluation, so they make informed decisions based upon objective data in developing services for children.

Objective D3: Students will develop a knowledge base which includes the updated and appropriate use of information technology in their practice.

Curriculum

The program of study emphasizes a base of training in school psychology with special concern for the application of psychological knowledge in a variety of settings.

Training in the following competency areas is provided: knowledge base in psychology and education; assessment; direct and indirect intervention; program development and evaluation; family systems; and professional role and functioning.

Students participate in supervised fieldwork experiences and practica from the first semester on. Students gain experience in local public schools as well as in the on-campus Child and Family Services Center. The culminating experience consists of a full-time, supervised yearlong internship in a school setting. Students are paid a stipend by the public school in which he/she interns, covering tuition for that year.

Satisfactory performance and skill development during the first two semesters, as well as success on a qualifying examination, are required for admission to the third semester of the program.

The following courses are required for all students in the M.A./C.A.S Program:

First Semester

PSYC 601	Foundations of Cultural Diversity	1
PSYC 603	Foundations of School Psychology	3
PSYC 607	Learning and Cognition	3
PSYC 626	Psychological & Educational Measurements	2
PSYC 627	Norm-Referenced Testing I	2
PSYC 636	Foundations of Interpersonal Effectiveness	3
PSYC 637	Introduction to Group Dynamics	1
PSYC 656	Field Experience in School Psychology I	
Semester Total Credit Hours		16

Second Semester

PSYC 606	Advanced Developmental Psychology	3
PSYC 629	Social-Emotional Assessment	3
PSYC 632	Norm-Referenced Testing II	2
PSYC 638	Psychotherapy and Behavior Change	3
PSYC 639	Exceptionality in Learning and Behavior	3
PSYC 657	Field Experience in School Psychology II	1
Semester Total Credit Hours		15

Third Semester

PSYC 628	Academic Functioning	3
PSYC 641	Introduction to Family Therapy	3
PSYC 646	Consultation and Prevention	3
PSYC 658	Clinic Practicum I	3
PSYC 671	Statistical Analysis and Research Design I	3
Semester Total Credit Hours		15

Fourth Semester

PSYC 609	Physical Bases of Behavior	3
PSYC 642	Clinical Seminar: Advanced Topics in School Psychology	3
PSYC 651	Academic Interventions	2
PSYC 664	Practicum in Academic Interventions	1
PSYC 659	Clinic Practicum II	3
PSYC 695	Professional Practice Seminar	3
Semester Total Credit Hours		15

Fifth Semester

PSYC 667	Internship in School Psychology I	9
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Sixth Semester

PSYC 668	Internship in School Psychology II	9
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Total Credit Hours Required for the Program 79

Undergraduate Preparation and Admission to the MA/CAS Program

(see below)

The Doctor of Psychology Degree Program

Overview

The Psy.D. Program in School Psychology is designed to prepare psychologists who will practice advanced skills in the schools and related child and family settings and to prepare graduates to meet professional employment demands for:

1. Psychologists in applied research;
2. Supervising psychologists;
3. Psychologists in child and family treatment agencies, hospitals, and private practice;
4. Professionals in higher education involved in the training of educators and clinicians.

The program leads to New York State license eligibility as a psychologist as well as state and national certification as a school psychologist, an additional credential offered by the National Association of School Psychologists.

Doctoral training focuses on applied research skills, advanced studies, and expanded areas of expertise. Graduates will possess the flexibility to assume a variety of roles and have the necessary skills to aid in the continuous development through research and practice of more effective educational and psychological practices. They acquire a broad knowledge base in psychological and educational theory, research and practice. They develop competencies in basic skill areas, advanced assessment, direct and indirect intervention including counseling and consultation with individuals, groups and systems, applied research, and supervision of others providing psychological services to children and families, particularly within a rural context.

Doctoral candidates are also encouraged to develop a specific area of expertise through a concentration of coursework, field experience and research.

This focus on a strong professionally oriented program logically leads to the Psy.D. versus the Ph.D. degree and is in concert with the view put forth in the final report of the Psychology Committee of the Doctoral Evaluation Project of the New York State Education Department.

Mission of the Psy.D. Program

Preparation of psychologists for applied professional practice in schools and other child and family oriented settings.

Goals and Objectives of the Psy.D. Program

Goal A: To produce professional psychologists with the personal qualities, interpersonal skills and awareness, and the ethical sensitivity predictive of success in a broad array of social, economic, and political contexts.

Objective A1: Students will develop an understanding of service delivery programs within a context respectful and appreciative of individual and cultural diversity.

Objective A2: Students will demonstrate the personal characteristics and interpersonal skills that affect the quality, social validity, and acceptability of the services they provide.

Goal B: To produce professional psychologists competent to access a broad range of theoretical and practical approaches with sufficient depth to be effective, flexible practitioners.

Objective B1: Students will develop proficiency in traditional and emerging approaches to the assessment and evaluation of children's academic, behavioral, and emotional problems.

Objective B2: Students will develop proficiency in the design and development of programs to intervene both directly and indirectly with children's academic, behavioral, and emotional problems.

Goal C: To produce professional psychologists competent in the conduct, comprehension, and application of research to professional practice.

Objective C1: Students will acquire a foundation in the scientific knowledge base of psychology and education.

Objective C2: Students will develop proficiency in the conduct, dissemination, and application of research related to professional practice.

Curriculum

A total of 120 credit hours are needed to complete the program. A minimum of 90 credits of coursework beyond the baccalaureate degree must be completed, in addition to one year of internship (18 credits) and a minimum of 12 credits of dissertation.

As specified by University regulations, all work for the degree must be completed within 7 years from the date of the start of the program. Every student must fulfill a residency requirement, which requires the student to be registered for courses as a full-time student for two consecutive semesters. Thus, this is a four-year program at the minimum, with three years of coursework (including approximately 800 hours of supervised practica experiences), at least one year of full-time residency, and then a year-long full-time supervised internship. The content of the coursework is a balance of scientific bases, research experiences, and academic and professional applied psychology.

Nine credits of electives are required, and may be fulfilled by courses or advanced practicum experiences. All students must pass master's level written comprehensive examinations,

engage in a research apprenticeship, pass a doctoral qualifying examination and complete a written dissertation.

Sample Sequence of Courses for a Full-Time Student's Program¹

The first four semesters are identical to the curriculum for the M.A./C.A.S. program, with the exception that doctoral students take PSYC 672- Statistical Analysis and Research Design II, during the fourth semester. Beyond the first two years doctoral students would enroll for the following:

Years 1 and 2:

61 credits from M.A. coursework	61
PSYC 672 Statistical Analysis and Research Design II	3
Elective	3

Years 1 and 2 Total Credit Hours 67

Beyond the first two years doctoral students enroll for the following:

Year 3:

Fifth Semester

PSYC 673 Statistical Analysis and Research Design III	3
PSYC 674 Research in School Psychology	3
PSYC 692 Supervision and Administration of Psychological Services	3
PSYC 699 Dissertation	3
Electives	3
Semester Total Credit Hours	18

Sixth Semester

PSYC 602 Seminar in Cultural Diversity	2
PSYC 608 Social Psychology and Behavior	3
PSYC 611 History and Systems of Psychology	3
PSYC 699 Dissertation	3
Electives	3
Semester Total Credit Hours	17

Year 4:

Seventh Semester

PSYC 669 Pre-doctoral Internship I	9
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Eighth Semester

PSYC 670 Pre-doctoral Internship II	9
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Minimum Total Credit Hours Required for the Program:

¹This sample program the case of a student who completes the degree in four years as planned. Many students require additional time to complete their dissertation.

Undergraduate Preparation for the M.A./C.A.S., and Psy.D. Programs

The student must present evidence of competence in the following subject areas:

1. introduction to psychology;
2. statistical and/or experimental methods; and
3. at least one of the following:
 - developmental psychology (e.g., child and adolescent psychology);
 - personality; or
 - abnormal psychology.

Students who have not taken these courses, but who are acceptable candidates otherwise, may make arrangements upon approval of the School Psychology Committee, to satisfy these requirements via coursework or independent study in the summer preceding admission. Other courses, such as tests and measurements, learning or educational psychology are looked upon favorably. Practical experiences in psychology or education as well as any other relevant experiences are seen as valuable preparation.

Up to 6 graduate credits may be transferred to the master's degree. Students who enter the doctoral program with prior graduate training relevant to the field of school psychology

(including a prior master's degree in school psychology) must complete ½ of their credits for doctoral coursework at Alfred University. This means that no more than 45 of the 90 credits of coursework can be transferred towards the doctoral degree.

Admission

Students applying to the School Psychology Program must submit the following documents directly to the Graduate Admissions Office:

- a completed application form;
- three (3) letters of recommendation;
- official transcripts of all undergraduate and graduate coursework;
- Graduate Record Examination (GRE) results-General Test;
- a personal statement of objectives; and
- a statement of research interest (Psy.D. only).

Admission to the M.A./C.A.S. School Psychology Program is limited to 18 students each year, and six students for the Psy.D. program. The deadline for applications to the Doctor of Psychology (Psy.D.) program in School Psychology is January 15. Review of applications for the M.A./C.A.S. program in School Psychology will begin on February 1. Late applications will be considered if places in the class still exist for qualified applicants. Early application is strongly encouraged.

Interview

An on-campus interview is expected of each applicant for admission to the program, but warranted exceptions may be made. Correspondence about the program should be addressed to Dr. Jana Atlas, Division of School Psychology, Alfred University, Saxon Drive, Alfred, NY 14802. Telephone (607) 871-2212; e-mail: atlasj@alfred.edu.

AUNY (Off-Campus) Programs

Alfred University offers a number of Masters-level programs in the New York City metropolitan area and other locations in upstate New York which are extension programs of regular campus offerings. Courses are made available through the Center for Integrated Teacher Education (CITE), which has provided professional development and in-service courses for teachers, principals, and related school staff since 1983. CITE is a professional service organization that manages the logistical operations for Alfred's NYC-area Programs. Classes for AUNY Programs are offered at venues in Brooklyn and Oceanside, Long Island. Alfred University's Downstate Program is designed for working professionals and recent college graduates in the Metropolitan Area. Students in the program are expected to maintain Alfred University's standard of graduate study. This program requires a basic level of computer and email literacy.

The Master of Science in Education program in Literacy is offered in Corning. Courses are taught on the campus of Corning Community College.

Programs Offered

- Master of Science in Education (MSEd) in School Counseling
- Master of Science in Education (MSEd)/Certificate of Advanced Study in Mental Health Counseling
- Certificate of Advanced Study in Mental Health Counseling
- Certificate of Advanced Study in Care Management
- Master of Public Administration (MPA)
- Master of Science in Education (MSEd) in Literacy

Curriculum

The program is structured to allow separate groups of no more than 25 students to enter each program. Each group remains together through the entire program, attending classes year-round for two years (Counseling), or 15 months (Public Administration), including summers. First year classes are prerequisites for all other classes in the program. Counseling and public administration programs adhere to fall start dates. The literacy and certificate of advanced study programs admit cohorts in the fall and spring.

All AUNY students are required to attend courses on the Alfred University campus in western New York State during each year of the program. Students in the Literacy, Public Administration, and Certificate of Advanced Study in Mental Health Counseling attend courses one summer only. Students in the MSEd in School Counseling program attend courses during the two summers that they are enrolled in the program. Students in the MSEd/Certificate of Advanced Study in Mental Health Counseling program attend courses during the three summers that they are enrolled. Students are notified regarding the schedule for these summer classes.

All matriculated students in AUNY programs are regular Alfred University students. As such, they have access to the University's on-line resources and to their academic records through [AU BannerWeb](#). Details regarding these privileges are outlined in the program handbook that students receive at orientation.

Campus Visit Requirement

Each AUNY program requires that students attend on-campus courses for one week during the summers that they are enrolled. The number of courses varies based on the length of the program. During campus visits, students attend class and participate in a program orientation. Campus housing is available to students. Alfred University and CITE assist students in making arrangements. Costs associated with these visits are not included in the cost of tuition. Information about transportation and housing is distributed to accepted students.

Master of Science in Education in School Counseling

Alfred University's graduate program in counseling prepares individuals for counseling positions in elementary, middle and high schools, colleges and universities.

Students acquire core knowledge and clinical skills that enable them to enter the profession of counseling. We (the faculty) strive to create a rigorous scholarly and supportive atmosphere for students to develop intellectually with a deep sense of social consciousness and self-awareness. We value teaching, scholarship, and service, which contribute to the mission of Alfred University.

The Alfred University school counseling program focuses on developing a broad set of helping skills that are applicable to any school setting in which counselors work. Students develop these skills both in and out of the classroom. Students spend over 50 days (300 clock hours) in a school setting. Coursework in the program offers practice in a range of counseling skills, while the field experience provides the student with a practical application in the area of counseling that he or she wishes to pursue. Recent practicum sites include: public elementary, middle and high schools, charter schools, after-school programs, Young Adult Borough Centers (YABC), and Saturday school programs.

Course Requirements and Sequence*Summer – Year 1*

COUN 602 Professional/Ethical Found of Counseling 3

Fall - Year 1

COUN 636 Principles of Counseling 3

COUN 642 Multi-cultural Counseling 3

COUN 606 Human Development: The Lifespan 3

Spring - Year 1

COUN 639 Group Counseling 3

COUN 604 Foundations of School Counseling 3

COUN 616 Mental Health, Exceptionality, & Disability 3

Summer - Year 2

COUN 626 Assessment in Counseling 3

COUN 605 Career Development and Life Planning 3

COUN 652 Techniques of Family Therapy 3

Fall - Year 2

COUN 638 Advanced Counseling Theory and Practice 3

COUN 657 Practicum in Counseling I 3

PSYC 646 Consultation and Prevention 3

Spring - Year 2

COUN 671 Research and Statistics 3

COUN 695 Topics in Counseling/Internship Seminar 3

COUN 658 Practicum in Counseling II 3

Program Total 48**Master of Science in Education/Certificate of Advanced Study in Mental Health Counseling**

Alfred University's graduate program in mental health counseling prepares individuals for counseling positions in public and private agencies that provide mental health and alcohol/substance abuse treatment. The program focuses on developing a broad set of helping skills that are applicable to any mental health setting in which counselors work.

Students develop these skills both in and out of the classroom. Students spend over 100 days (700) clock hours in mental health settings. Coursework in the program offers practice in a range of counseling skills, while the field experience provides the student with a practical application in the area of counseling that he or she wishes to pursue. Recent internship sites include: outpatient centers of hospitals, in-patient psychiatric units, residential substance abuse programs, outpatient substance abuse programs, multi-service agencies, and private practices.

This program requires that students complete 60 credit-hours of course work, including a 3-credit practicum experience and two 3-credit internships. Individuals who successfully complete this program are eligible for the limited permit as a mental health counselor in New York State. Graduates must then complete 3,000 hours (approximately 2-years, fulltime) of supervised mental health counseling experience (1,500 hours of which must be direct client contact), and pass the Certified Clinical Mental Health Counselor examination which serves as the licensing exam for New York State.

Course Requirements and Sequence*Summer – Year 1*

COUN 602 Professional/Ethical Found of Counseling 3

Fall - Year 1

COUN 636 Principles of Counseling 3

COUN 642 Multi-cultural Counseling 3

COUN 606 Human Development: The Lifespan 3

Spring - Year 1

COUN 639 Group Counseling 3

COUN 604 Foundations in School Counseling 3

COUN 615 Psychopathology & Differential Diagnosis 3

Summer - Year 2

COUN 626 Assessment in Counseling 3

COUN 605 Career Development and Life Planning 3

COUN 652 Techniques of Family Therapy 3

Fall - Year 2

COUN 638 Advanced Counseling Theory and Practice 3

COUN 657 Practicum in Counseling I 3

PSYC 646 Consultation and Prevention 3

Spring - Year 2

COUN 671 Research and Statistics 3

COUN 641 Counseling Special Populations 3

COUN 695 Topics in Counseling/Internship Seminar 3

COUN 663 Internship in Mental Health Counseling I 3

Summer Year 3

COUN 628 Assessment in Mental Health Counseling 3

COUN 619 Program Development and Grantsmanship 3

COUN 664 Internship in Mental Health Counseling II 3

Program Total 60**Certificate of Advanced Study in Mental Health Counseling**

The Certificate of Advanced Study in Mental Health Counseling is a part-time program designed for individuals who have already earned master's degrees in counseling and either majored in school counseling or did not fulfill the eligibility requirements for the mental health license.

This includes master's degrees in school counseling, school psychology, community-agency counseling, and college counseling/college student development, older general counseling degrees, applied psychology with a counseling specialization, and human services with a counseling specialization. It does not include master's degrees in general psychology, experimental psychology, social work, human development, or human services without a counseling specialization. Licensure regulations are very specific in requiring a master's degree in counseling.

The CAS is an 18 graduate credit program consisting of four 3-credit classroom-based courses and two 3-credit internship courses spanning three semesters. All courses and internship requirements are designed to meet the defined training requirements for the Licensed Mental Health Counselor (LMHC) credential in New York State. As an approved program, individuals who successfully earn the CAS have completed the degree requirements that make them eligible for the LMHC.

Mental health counselors must have a critical body of knowledge and set of skills in order to help clients function effectively in their lives. To achieve this goal, the program requires that students who enter the program have successfully completed a master's degree in counseling that includes the following foundation areas: human growth and development; social and cultural foundations; the nature of helping relationships; group theory and group process; family counseling skills; career and lifestyle development; appraisal, research and program evaluation; ethics, professional standards, and credentialing; and professional issues. The CAS program then supplements these basic foundations with course work specific to the mental health setting. Finally, each student is required complete and internship experience in order to ensure that students are able to apply the skills and knowledge they have learned, as well as meet the NYS regulations for the LMHC.

Course Requirements and Sequence*Semester 1*

COUN 603 Foundations of Mental Health Counseling 3

COUN 615 Psychopathology & Differential Diagnosis 3

Semester 2

COUN 619 Program Development and Grantsmanship 3

COUN 628 Assessment in Mental Health Counseling 3

Semester 3

COUN 663	Internship in Mental Health Counseling I	3
COUN 664	Internship in Mental Health Counseling II	3
or COUN 641	Counseling Special Populations	

Program Total **18***

*Individuals who have earned master's degrees consisting of less than 42 credits may be required to complete additional coursework to bring them up to the licensing requirement of 60 graduate credits.

Certificate of Advanced Study in Care Management

The Certificate of Advanced Study in Care Management is designed to respond directly to the needs of the healthcare system transformation and healthcare reform. Care managers are required to possess knowledge and skills in behavioral health and chronic health issues in order to articulate, coordinate, and manage patients with multiple care needs.

The CAS in Care Management incorporates the knowledge and skills requirements established by the National Academy of Certified Care Managers.

Course Requirements and Sequence*Semester 1*

CARE 602	Foundations of Care Management	3
COUN 636	Principles of Counseling	3

Semester 2

COUN 603	Foundations of Mental Health Counseling	3
COUN 695	Topics in Counseling	3
GERO 606	Health Care Delivery Systems	3

Program Total **15**

Master of Public Administration Program

The MPA program is designed for those interested in management, administration, and the design and implementation of services in public, nonprofit, and community-based agencies. Interest areas include law enforcement, probation, youth corrections, community planning and development, programs for the aging, housing, public health, hospital administration, city and county administration, welfare services, social counseling and other municipal and social services.

The program fulfills the graduate educational requirements for working professionals who wish to advance their careers, and for pre-service students who wish to enter the government and nonprofit sectors. The program focuses on public policy issues, organizational behaviors and development, budget formation and management, and on utilizing effective management techniques and decision-making skills in the delivery of goods and services by nonprofit and public organizations.

Program Process

The MPA program is designed to be a part-time program for working adults. All classes meet for full days on weekends, with each course consisting of five class sessions. Students become part of a group that meets on Saturdays or Sundays and remains together for the duration of the program.

Core courses relate to the needs of those intending to serve in administrative and managerial roles in health care, non-profit, community-based agencies, and criminal justice organizations. Elective courses include public sector budgeting and accounting, legal and regulatory issues, program evaluation, and specialty topics in health care and non-profit management.

Students who follow the prescribed course sequence can expect to complete the program in 15 months, including two summers of academic work.

Course Sequence*Semester 1*

PUAD 510	Principles of Public Administration	3
PUAD 597	Special Topics in Public Administration	3
PUAD 571	Public Admin & Agency Management	3
PUAD 598	Capstone Seminar (Foundation)	

Semester 2

PUAD 542	Legal Issues in Administrative Law	3
PUAD 537	Foundations of Non-Profit Management	3
PUAD 535	Foundations of Healthcare Management	3
PUAD 598	Capstone Seminar I	1

Semester 3

PUAD 561	Organizational Processes	3
PUAD 528	Public Sector Budgeting and Accounting	3
PUAD 541	Program Evaluation and Grantsmanship	3
	(Summer Residency Week in August)	

Semester 4

PUAD 581	Human Resources Administration	3
PUAD 531	Political Environment and Public Policy	3
PUAD 599	Capstone Seminar II	2

Program Total **36**

Corning Programs**Master of Science in Education in Literacy**

The Division of Education offers a program in the teaching of literacy leading to the Master of Science in Education (M.S.Ed.) based in Corning, NY. The graduate program in literacy is designed to prepare master teachers of literacy as consultants, program coordinators, specialists and classroom teachers (birth through grade 6). The program's emphasis is placed on the practical application of current reading approaches and strategies, materials, methodologies, goal assessment, techniques, evaluation, and professional responsibilities of the literacy teacher. Upon completion of the program, the student is expected to demonstrate a thorough knowledge of both developmental and remedial literacy.

Mission and Objectives

The Education Division at Alfred University is accredited by the Council for Accreditation of Education Programs (CAEP). Alfred University collects and analyses evidence of the following claims and cross cutting themes as a means of continual improvement.

The Alfred University Division of Education Claims

1. Graduates of our programs learn and understand the subject matter they are certified to teach.
2. Graduates of our programs learn how to convert their knowledge of a subject matter into compelling lessons that meet the needs of all learners.
3. Graduates of our programs act on their knowledge in a caring and professional manner that leads to achievement for all learners.

Cross-cutting dimensions integrated throughout the program

- Learning how to learn
- Multicultural perspectives and understanding
- Technology

Literacy Teacher Program (Birth – Grade 6)

Graduates of the Literacy program have completed the academic requirements for professional certification in all teaching areas, (including Early Childhood/ Childhood, Art, and Middle and Adolescent subjects) regardless of the subject area of their initial certification.

Purpose of the Degree

The graduate program in literacy is designed to prepare master teachers of literacy as consultants, program coordinators, specialists and classroom teachers (Birth - grade 6). The program's emphasis is placed on the practical application of current reading approaches and strategies, materials, methodologies, goal assessment, techniques, evaluation, and professional responsibilities of the literacy teacher.

Upon completion of the program, the student is expected to demonstrate a thorough knowledge of both developmental and remedial literacy (Birth - grade 6).

Admission to the Literacy Program

Prior to entering the Literacy Program, applicants must meet all requirements for current New York State classroom teacher certification. Applicants must provide evidence of teacher certification, official undergraduate transcripts and letters of recommendation as required in the graduate application process.

GPA Requirement

All graduate students admitted to Alfred University must maintain a grade point average of 3.00 or higher. In addition, to be eligible for certification in New York, students in this program should have no grade below "B" in core pedagogical courses.

Certification

The degree in Literacy meets the criteria for, and may be used in partial fulfillment of, the requirements for permanent and professional certification in New York. Additionally, students completing the Literacy Program fulfill the requirements for certification in Literacy (Pre-K - grade 6).

Required Courses

EDUC 503	Competency in the Teaching of Literacy	3
EDUC 504	Diagnostic and Remedial Techniques in Literacy	3
EDUC 505	Literacy in the Content Areas	3
EDUC 507	Literacy Seminar and Field Experience	6
EDUC 513	Literature for Children	3
SPED 556	Teaching Students with Special Needs in the Inclusive Classroom	3
EDUC 695	Master's Research	3

Elective Courses

Select two of the following*:

EDUC 593	Use of Technology in the Classroom	3
SPED 545	Learning Disabilities	3
SPED 558	Managing the Classroom	3
EDUC 542	The Teaching-Learning Process	3

*with advisor approval, other electives may be substituted

Total Credit Hours Required 30

Course Descriptions

The courses listed in this catalog are active as of Fall 2019, which means they could be offered in any given term. To view courses actually offered and scheduled for a particular term go to AU [BannerWeb](#), select Class Schedule, and then select a semester or other term.

Course Numbering System

Courses offered at Alfred University are numbered as follows:

- 001–099 Courses of a remedial nature that do not carry credit toward any University degree.
- 100–199 Courses without prerequisites primarily for undergraduate students in their first year of study.
- 200–299 Courses with or without prerequisites primarily for undergraduate students in their first or second year of study.
- 300–399 Courses usually having prerequisites and offered primarily for undergraduate students in their third or fourth year of study.
- 400–499 Advanced courses primarily for undergraduate students in their fourth year of study.
- 500–599 Courses primarily for graduate students. With permission of the instructor, undergraduate seniors in good standing may enroll in these courses for undergraduate or graduate credit. (May count for graduate credit only if not required to complete the undergraduate degree.)
- 600–699 Advanced graduate courses open only to graduate students.

Courses offered by The School of Art and Design

Studio Art

ART 500 - Special Topics in Art 0-4 hours. Topics and issues not covered in other courses are explored. Topics vary from one term to another.

ART 501 - Studio Elective 1-6 hours. Required for all MFA graduate students. The studio elective gives students an opportunity to work in media that they are unfamiliar with or that might be incorporated into their studio work. Students must work in a media and studio outside their primary discipline. Any exceptions must be made in consultation with the appropriate advisor. Enrollment is by permission of the studio faculty.

ART 522 - Advanced Sculpture/Dimensional Studies 1-8 hours. This is the primary component of individually directed/generated studio research during the first year of graduate studies in the program. The focus of the graduate student's critical inquiry is done in consultation with the specific division's faculty who are responsible for either the concentration in Sculpture or Glass Art.

ART 523 - Work and Analysis 4 hours. This course functions as the primary forum for group dialogue among MFA students in Electronic Integrated Arts. Regular group critiques of student work occur during class, allowing for the development of understanding of how work is produced and the ability to contribute insight to others. Narrative, symbolic, personal, cultural and poetic implications are

addressed. In addition to dialogue relative to students' work, questions pertinent to contemporary art practice are discussed weekly. This discussion includes debates on contemporary artists and current philosophical approaches to image making both critical and aesthetic. The goal is to provide the student with a strengthened sense of context from which to proceed as an artist.

ART 524 - Electronic Strategies (Non time based) 2 hours. Required of first year graduate students working in Electronic Integrated Arts. This course is designed to help create a context in which to ask questions about the nature of dynamic media relative to the making of contemporary printed images. Students will work with moving and still images using combinations of digital processes, including: video capture, digital drawing, electronic still cameras, scanning and image processing. Participants will investigate the making of large format digital images as ways to understanding how ideas about print media are expanding. The course will focus on the impact of digital print media and how it functions to construct the visual languages of contemporary art making. Experimentation with applications that cross media will be extensively explored. These media may include: drawing, painting, photography, bookmaking, video, multimedia and Internet interfaces. The studio comprises a state of the art Macintosh lab with scanning, video editing and grabbing capabilities and Internet interfaces. Printing capabilities include film recording, image setting, and a large variety of digital color printing devices including wide format digital printing.

ART 525 - Advanced Electronic Arts 1-8 hours. Required each semester for graduate students working in Electronic Integrated Arts. Each graduate student will register with Electronic Integrated Arts faculty on an independent study basis. This course is an opportunity for self-generated studio work. During the third and fourth semesters the primary emphasis of this course will be thesis preparation.

ART 526 - Electronic Strategies (Time based) 2 hours. Required of first year graduate students working in Electronic Integrated Arts, this course provides both a technical and theoretical foundation for the production of time-based works in the integrated video and sound studios. Experimentation with application that crosses media is extensively explored. Through demonstrations, critiques and lab work students gain a thorough understanding of the technical process as well as insights and expertise into the physical integration of traditional media with new technologies. Emphasis is placed on the making of artwork through the use of electronic integrated media. The course also includes presentations, class discussions and readings designed to create a critical dialogue. Areas of theoretical concern include historical and contemporary perspectives on imaging and sound technologies.

ART 529 - Studio Practice 2 hours. This seminar is a forum for the graduate students in the Sculpture/Dimensional Studies program to engage in discussions and group critiques. Through a series of weekly meetings all of the students in both Glass Art and Sculpture come together to form a community of creative enquiry, to consider relevant contemporary art issues and support each other's art practice.

ART 535 - Interactive Media Studio 2 hours. Develop responsive environments and generative systems that visualize, sonify, animate/motorize events, onsite or online. Use "computer vision" and physical sensors for media projections, 3D stereographics, moving mechanical assemblies. Make your own software and physical interfaces for performances and installations.

ART 540 - Graduate Painting 1-8 hours. The focus of this course is self-generated studio work and research during the first year of graduate study. This is the main studio-based interaction between student and faculty advisor. Students work under the guidance of individual faculty studio advisors, with midterm and final reviews by Division of Drawing, Painting, and Photography faculty and Dusseldorf faculty.

ART 542 - Graduate Painting Critique and Discussion 4 hours. This course is a platform for peer critique and discussion on contemporary art issues. Students read and discuss pertinent texts and participate in critiques. The course may also include meetings with visiting artists and field trips to museums and galleries.

ART 544 - Professional Practices 4 hours. This course takes place during the Dusseldorf semesters and focuses on cultural exposure, first hand interaction with art world professionals, and related workshops and discussions on current professional practices. Students gain a global perspective of the art world by interacting with visiting artists and lecturers through individual studio visits, group discussion, and museum and gallery field trips.

ART 550 - Independent Study 1-4 hours. Designed for graduate students to work with faculty outside of the School of Art and Design. Enrollment is by permission of the faculty and with approval of the respective Division Chair. A written Plan of Study is required.

ART 552 - Advanced Ceramics 1-8 hours. This is the primary component of the first year of ceramic art graduate studies. The focus is on individually directed studio research in consultation with the faculty. Studio work is evaluated at the midterm and final reviews by the entire faculty. Students work individually with a different faculty advisor each semester.

ART 560 - Ceramic Graduate Seminar 2 hours. This seminar is required for first year, second semester graduate students in Ceramic Art. It is a faculty structured, student generated, and research discussion group course focusing on the history of contemporary ceramic art, mid 19th century to

the present. It is intentionally founded on principles of artist studio practice rather than on academic art history methodologies.

ART 580 - Alfred Summer Ceramics 4 hours. This summer course offers 4-weeks of comprehensive ceramic art experience. Students can enroll in the 4-week open studio intensive or two consecutive 2-week sessions. Students work independently with faculty oversight and guidance from Graduate Teaching Assistants. Individual work space is provided with wheels, tables and other basic equipment. Personal Development is emphasized. (This course may be taken twice for credit.)

ART 582 - Ceramic Materials I: Claybodies and Glazes 2 hours. This course covers the fundamentals of body and glaze development focusing on ceramic raw materials and their role in forming and firing for functional ware and sculpture bodies. Glaze formulations are also discussed, including glaze chemistry, texture, and causes of common defects.

ART 583 - Ceramic Materials II: Problem Solving for Artists 2 hours. This is an open forum discussion-based course that builds on ART 582-Ceramic Materials I and stresses the application of ideas and concepts to solve studio problems. Students are expected to participate in the discussion, to bring examples of problems, and share the results of experiments to rectify those problems. Prerequisite: ART 582.

ART 584 - Introduction to Kiln Procedures and Construction 4 hours. The focus of this lab/lecture course is the operation, maintenance and design of ceramic art based kilns. Discourses include: kiln theory, combustion, fuels, refractory materials, basic electrical theory and construction. Students design their own kiln using blueprints, calculations for heat input and a material source list.

ART 587 - Introduction to 3D Modeling and Rapid Prototyping 2 hours. This course offers an introduction to digital fabrication techniques using computer-aided design and rapid prototyping equipment. Fundamental techniques in computer-aided design are developed through tutorials and in-class demonstrations which directly develop skills for creating 3D objects. May be repeated one time for credit (up to a total of 4 credit hours).

ART 590 - Methods of Digital Output 2 hours. This course compliments ART 587-Intro to 3D modeling and Rapid Prototyping, allowing the student to acquire a practical application for 3D modeling through use of CAD (SolidWorks, Rhino), CAM (Delcam for SolidWorks, RhinoCam and Mastercam), and reverse engineering software (Rapidworks, Scanstudio). Students learn technical competency in contemporary technology for 3D fabrication. May be repeated one time for credit (up to a total of 4 credit hours).

ART 599 - Glaze Effects and Color 4 hours. This course examines the nature and properties of materials that create special effects and color in glazes, with an intensive

approach to the study and analysis of glazes. When taught as on online hybrid in a Fall or Spring semester, the course combines online instruction with a required on-campus laboratory component (ART 599L). There is no on-campus lab component when taught as an online course in Allen Term or Summer Term. May be repeated one time for credit (a total of 8 credit hours).

ART 601 - Studio Advising Support 1-8 hours. Provides graduate students an opportunity to work with faculty outside of their division. Enrollment is by permission of the faculty, based on space/time availability and with approval of respective Division Chair.

ART 660 - First-Year Graduate Seminar 2 hours. This seminar brings together the students working in all four graduate programs to facilitate their participation in creating a framework for understanding the practice of art-making in relation to the contemporary, global and cultural terrain. Required for all first year MFA students.

ART 671 - Written Thesis Preparation for Electronic Integrated Arts 4 hours. The studio work is supported by a written thesis report that includes a detailed statement about the work, a technical documentation of materials and processes used, and a DVD of thesis work. This documentation is archived in the Scholes Library. Additionally, the course is structured as a seminar with all second year EIA MFA students participating.

ART 672 - Written Thesis Preparation 2 hours. The studio work is supported by a written thesis report that includes a detailed statement about the work, a technical documentation of materials and processes used, and 20 slides of the thesis work. This documentation is archived in the Scholes Library. Additionally, the course is structured as a seminar with all Ceramic Art and Sculpture/Dimensional Studies MFA students participating.

ART 674 - Graduate Painting Written Thesis Preparation 2 hours. The studio work is supported by a written thesis report that includes a detailed statement about the work, a technical documentation of materials and processes used, and images of the thesis work. This documentation is archived in the Scholes Library. This course is structured as a seminar with all second year MFA Painting students participating.

ART 680 - Thesis-Ceramic Art 1-8 hours. The ceramic art thesis is a body of work that is presented in a gallery exhibition at the end of the fourth semester of study. Students work with individual faculty studio advisors, with midterm and final reviews by the entire ceramic faculty. The faculty will choose a work from the exhibition for the Glory Hole Collection of the Schein-Joseph International Museum of Ceramic Art at Alfred.

ART 681 - Thesis-Electronic Integrated Arts 1-8 hours. Required each semester for graduate students working in Electronic Integrated Arts. Each graduate student will register with Electronic Integrated Arts faculty on an independent study basis. This course is an opportunity for

self-generated studio work. During the third and fourth semesters the primary emphasis of this course will be thesis preparation.

ART 682 - Thesis-Sculpture/Dimensional Studies 1-8 hours. This course embodies the studio component of the written thesis. The focus is on the continuation of individually directed studio research in consultation with the faculty. A body of work is presented in a gallery exhibition at the end of the fourth semester of study.

ART 683 - Graduate Painting Thesis 4-8 hours. The third and fourth semesters of the Painting MFA focus on the development of the thesis work. A body of work is presented in a thesis exhibition at the end of the fourth semester of study. Each student continues to work independently under the guidance of individual faculty studio advisors, with midterm and final reviews by Division of Drawing, Painting and Photography faculty and Dusseldorf faculty.

Art History

ARTH 500 - Topics in Art History 2 or 4 hours. Topics vary from semester to semester.

ARTH 504 - Global Arts: Contemporary Asia 4 hours. This course examines contemporary arts of Japan, China, North/South Korea, India, Pakistan, Tibet, and Vietnam, with a focus on emerging theories of global arts and diverse art practices, such as curating, viewing, and the making of Asian art today.

ARTH 505 - South Asian Arts 15-20c: Mughals to Modern 4 hours. This course examines the visual arts of the South Asian subcontinent from the Mughal period, in the 16th century, to modern art of the mid-20th century. In addition to religious and royal architecture, we view paintings, sculpture, courtly arts, prints and photography.

ARTH 506 - Arts of Japan 4 hours. This course is an introduction to Japanese visual arts, material culture, and architecture from prehistory to the present. Major monuments of Japan are analyzed according to their historical, social, and religious contexts. A field trip to study objects in the Johnson Museum Collection at Cornell University is part of the course.

ARTH 507 - East Asian Design and Material Culture 4 hours. This course is a survey of ceramics, wood, metalwork, textiles and product design from the 15th century to the present in China, Korea and Japan. Emphasis is on aesthetics, production systems, social worlds and craft discourse. (Offered Fall, odd years)

ARTH 520 - Islamic Art in the Mediterranean World 4 hours. This course traces the history of the art, architecture and culture of the Islamic world bordering the Mediterranean basin. Religious and secular works of art are examined in order to foster greater understanding and appreciation of Islamic visual culture and aesthetics.

ARTH 521 - Greek and Roman Art and Architecture 4 hours. A study of art and architecture from ancient Greece and Rome. Among other issues, the course addresses changing attitudes of style, function, and patronage during this period and investigates the influence of social and religious belief. The study of Greek art emphasizes the development of stylistic periods. Roman art study focuses on individual historical periods of various emperors as reflected in the patronage.

ARTH 522 - Medieval Art and Architecture 4 hours. This course explores medieval art--architecture, painting, sculpture and the decorative arts--through the study of subject matter and the major stylistic developments from the religious and secular spheres of medieval society. Other topics include patronage; artistic production; and workshop practices.

ARTH 524 - Medieval Illuminated Manuscripts 4 hours. This course surveys the role and development of illuminated manuscripts--hand-written, painted books--in Western Europe beginning with the seventh century and ending in the fifteenth century with the invention of the printing press.

ARTH 531 - Italian Renaissance Art and Architecture 4 hours. This course is an in-depth study of the major stylistic forms, directions and iconography in Italian Renaissance art and architecture (14th through 16th centuries). We explore the systems of art-making and patronage in the major urban and court centers.

ARTH 532 - Northern Renaissance Art 4 hours. This course is an examination of Northern Renaissance art (France, Germany, the Netherlands and England) from the 1400s until about 1600. The period is marked by an increase in the materialism of religious faith, most notable observed in the extravagant artistic patronage by the royal courts and the Church.

ARTH 533 - Baroque Art and Architecture 4 hours. This class is a survey of European art and architecture during the 17th century within cultural, religious, political and intellectual frameworks. Main themes include: the impact of the Counter Reformation on the visual arts; urban planning; art as propaganda; specialization of the art market; rise of art academies and art theory.

ARTH 539 - History of Ceramic Art, Craft and Design: Global Flows 4 hours. In this course we examine the history of ceramic art, craft and design according to its major global flows. Recent scholarship, primary texts, and the direct study of objects from the Alfred Ceramic Art Museum collection form the basis for discussion of the history of ceramics--aesthetic values, praxis, patronage, and cultural identities.

ARTH 542 - Primitivism: A Western Perspective 4 hours. This course surveys the concept of the "primitive" in Western art from the Enlightenment to the present. Students explore the shifting nature of primitivism, examine the relationship between art and colonial expansion, and critique

the formal and thematic appropriation of non-Western artifacts by European and American artists.

ARTH 543 - Modern Art 4 hours. Encompassing the movements of Symbolism to Surrealism, this course covers the developments in modern art during the first half of the 20th Century. Students explore such themes as modernity, primitivism, and utopian theory as well as the stylistic developments and formal innovations of this period.

ARTH 544 - In the Studio: Modern and Contemporary Painting 4 hours. This course investigates the facture of painting--the marking, process, and surface of work--through a series of case-studies from the late 19th century to the present. It is designed for graduate students enrolled in the Alfred-Dusseldorf MFA Program and advanced undergraduates.

ARTH 545 - Understanding Culture through the Lens of World Cinema 4 hours. Through the lenses of various themes--youth, sexuality, class, religion, politics, revolution, time, and space--this course explores how different cultures throughout the world understand and communicate their cultural values through cinema.

ARTH 550 - Independent Study 1-4 hours. Designed for graduate students to work with Art History faculty on an independent study basis. A written Plan of Study is required.

ARTH 551 - In, of, and around Contemporary Craft 4 hours. This course investigates the nature and place of craft in modern culture. We traverse a century of craft-based practices--from the artisan guilds of the Arts and Crafts Movement to the virtual guilds of today--focusing on recent strategies and practices

ARTH 552 - Contemporary Projects in Art 4 hours. This interactive course focuses on and studies the projects of selected contemporary artists. These projects serve as platforms for investigating issues and problems related to various contemporary art forms and movements including, the embodiment of the viewer, play and reality, new technologies and consciousness, ironic modernism, and the critique of the post-medium condition.

ARTH 554 - Recent Sculptural Practices 4 hours. A series of recent projects exploring contemporary issues in sculpture is the focus of this class. We look at an international array of artists, including: Matthew Barney (United States), Robert Irwin (United States), Juan Munoz (Spain), Doris Salcedo (Colombia), Thomas Schutte (Germany), and Rachel Whiteread (Britain). The work of these artists is examined in the context of larger post-war debates.

ARTH 555 - Picasso in Context 4 hours. This course offers an in-depth study of Picasso in relation to other modern artists and movements. Special attention is paid to the nature of style. Students conduct research on the development of abstraction in the early twentieth century.

ARTH 560 - Exploring Art History: Concepts, Methods and Practices 4 hours. This writing-intensive seminar introduces students to research methods in art history and to a range of approaches of historical and current significance. Students identify art historical problems, formulate hypotheses, conduct research, read critically, build arguments, and present reports.

ARTH 561 - Viewing Sculpture: Figurative, Modernist, Minimalist, Performative 4 hours. A close examination of the nature of sculptural viewing over the past 200 years. Sculptural theory is considered alongside contemporary artistic practice, ranging from Antonio Canova's neoclassical figures to Janet Cardiff's audio walks. Primary sources will be used for class discussion, along with Potts' "The Sculptural Imagination". In addition to thinking critically about the phenomenon of viewing, we will investigate the changing attitudes toward sculpture and the broadening definitions of three-dimensional work in the modern period.

ARTH 566 - Histories of Photography in the Non-Western World 4 hours. This seminar focuses on how photography and its modern modes of vision were disseminated and adapted around the globe since its 1839 invention in Europe. The course is designed as a research lab: students develop both a short written report and related visual project.

ARTH 582 - Gender and Art History: Feminist Art in a Global Frame 4 hours. This course examines 20th and 21st century art and media that engage with feminist and gender issues in a global context. The first few weeks are spent reviewing a concise history of first- and second-wave feminist thought, particularly its relation to art and visual culture. Thereafter, selected contemporary art from all regions of the globe are covered.

ARTH 593 - Art in the Age of Digital Recursion 4 hours. A round-table seminar based on extensive group discussions and in-depth research on recent innovations in technology and how that technology has impacted art production and theory.

ARTH 660 - First Year Graduate Seminar 2-4 hours. Required for all first year MFA graduate students. This seminar brings together the students working in all three graduate programs to facilitate their participation in creating a framework for understanding the practice of art making in relation to the contemporary, global and cultural terrain.

Courses Offered by The College of Business

MBA 600 - Seminar in Business Issues 3 hours. A seminar that focuses on special topics in the field of management and business administration. Topics vary from one semester to another. May be repeated for credit.

MBA 601 - The Health Care Delivery System 3 hours. This course presents an overview of the components and

operations of the Healthcare System of the United States. A summary of the development of the Healthcare System and the major factors that have driven the evolution of that system over time are reviewed. The healthcare system will be studied by reviewing the foundations, resources and process of the system and their impact on outcomes. Students will analyze a foreign healthcare system and compare to the US healthcare system. (Offered Fall, even years)

MBA 603 - Health Care Policy 3 hours. This course provides student with the ability to analyze the relationship between power and political behavior. Students evaluate how healthcare policy impacts healthcare outcomes. A policy setting model is analyzed as a framework for understanding the development of healthcare policy. Use of case analysis illustrates the interrelationships of functions and the essential unity of policy setting, implementation and evaluation in healthcare. (Offered Fall, odd years)

MBA 604 - Power and Politics in Health Care 3 hours. Student apply concepts related to the relationships between power and political behavior and how this intersection affects outcomes. Students learn effective methods to anticipate and respond to political situations, as well as develop strategies for building collaborative relationships with multiple constituencies in healthcare. The concept of power is examined in the context of politics and policy setting. (Offered Allen Term, Summer)

MBA 606 - Legal and Ethical Issues in Healthcare 3 hours. Students analyze the law and ethics as it affects health care management. Case analysis are applied to legal and ethical concerns of specific importance to health care managers. Key aspects of legal principles involved in health care management will be evaluated using a structured framework. Application of special issues in health care including principles of liability, social responsibility, patient rights and responsibilities, acquired immune deficiency syndrome, access to health care and payment issues are evaluated. (Offered Spring, odd years)

MBA 608 - Health Care Finance for Non-Financial Managers 3 hours. This course introduces financial management concepts to the non-financial manager. While concentrating on healthcare organizations this course is applicable to a wide range of organizations. Topics include introductions to financial and managerial accounting, the theory and practice of how financial information is gathered, reported and used to provide meaningful conclusions about the financial performance of health care organizations. The focus of this course is on how managers use financial data. (Offered Allen Term, Summer Term)

MBA 610 - Leadership Dynamics 3 hours. The course focuses on the theory and practice of situational leadership. Course participants will learn about theories of motivation, organization design and performance management by examining factors that influence individual and group performance management. Teaching methods will include the use of the School's behavioral lab facilities, interactive software, diagnostic tests to evaluate each participant's

leadership skills, experiential exercises and group discussions.

MBA 613 - International Marketing 3 hours. This course introduces and discusses the critical factors influencing marketing management in a global environment related to analytic/strategic decisions and personal skills. Analyzing environmental and cultural information in a foreign country and managing with a global mindset are critical factors to assure success. Current examples and case studies address the key issues that marketers must keep in mind to create effective marketing programs for foreign markets. The relationships of international marketing to advertising, global competition, cultural and ethical concerns, theory vs. practice, emerging technologies, verbal and visual language and other relevant issues are also examined. The class is operated as a seminar requiring each class member's contribution in reading assigned material and active participation in class discussion including one group project.

MBA 614 - Corporate Finance 3 hours. This course deals with the financial manager's job to add value and maximize shareholders' wealth. Students develop their skills to learn and apply theories of finance related to capital budgeting techniques, capital structure working capital management, and international corporate finance through critical problem solving, cases, and a multiple period simulation of a hypothesized corporation. Students make major operating and financial decisions and sharpen their skills to integrate this course with other disciplines. This includes general decision-making for both short-term liquidity needs and long-term financing and investing projects to sustain the corporation growth and attain its overall objective of value creation to the stakeholders.

MBA 621 - Business Decision Making 3 hours. This course challenges students to integrate all of the discipline-specific skills developed in the MBA foundation courses within a dynamic decision-making context. The focus of the course is the process of problem framing/identification, analysis, and decision making in complex and uncertain environments. Working in a simulated environment, students develop critical judgments about the efficient and effective application of core knowledge by applying the tools of analysis appropriately, and then extracting useful insights and drawing managerially relevant recommendations from the analysis.

MBA 622 - Quality Management 3 hours. The focus of this course is the fundamental concept of quality management; the design and development of management systems which contribute to achieving customer-driven, continuous improvement. The course is interdisciplinary in nature, drawing principally from the fields of MIS, market research, management theory and statistical control. The course utilizes a mix of case studies, lectures, and homework assignments in developing an appreciation of the theory and practice of quality management including Six Sigma Management. Emphasis is on developing skills with specific techniques and systems central to quality management principles.

MBA 624 - Strategic Management 3 hours. The course is case-oriented and focuses on the analysis of complex business problems via the integration of the subject matter of all previous program courses. Linking the firm's internal and external environments from the total-enterprise perspective of the general manager, this course undertakes a systematic inquiry into the strategic management and administrative business policy issues pertaining to the organization's performance and effectiveness. The course consists of four major topics: Business Planning Simulation (BPS), Business Information Collection (BIC), Corporate Performance (CPM) and Stakeholder Relationship Management (SRM). Enterprise Resource Planning (ERP) software will be used to demonstrate the importance of an enterprise-wide data base in strategic decision making.

MBA 626 - Innovation Management 3 hours. This course aims to equip students with the relevant skills, strategies, tools and techniques for managing innovation at both strategic and operational levels. It draws upon research and development in innovation and provides different approaches based on real-world cases and the experiences of leading organizations from around the world.

MBA 630 - Management for Global Leaders 3 hours. This course focuses on the theory and practice of leadership and management from a global perspective. Topics in this course include the impact of culture and diversity, cross-cultural communication and negotiation, international human resource and staffing issues, global sustainability and corporate social responsibility, virtual leadership and leading global teams, and strategic leadership and management, among others.

MBA 635 - US Healthcare Business and Policy 3 hours. The U.S. health care system operates in an intense, dynamic, and complex environment. As never before, we should understand the key components of this system, including its environment and emerging trends. This course is an overview of the health care system, including its components, how we pay for health care, and how health care is delivered. Students analyze the impact of events and political decisions on the health care system and prepare a comparison between the current US system and a foreign healthcare system -- highlighting the differences and similarities, advantages and disadvantages.

MBA 650 - Independent Study 1-4 hours.

MBA 651 - Economics for Managers 3 hours. This course provides fundamental understanding of microeconomic concepts used in managerial decision making. It covers microeconomic theory, including supply and demand, competitive and noncompetitive markets, production, costs, strategic behavior of firms, and industry structure.

MBA 652 - Negotiation and Persuasion 2 hours. This course provides tools to enable students to become more effective negotiators. The ability to negotiate rests on the correct combination of conceptual and interpersonal skills. In this course students develop and practice analytical and interpersonal strategies and skills that increase their ability

to persuade others and analyze, prepare for, and engage in negotiation more strategically.

MBA 653 - Accounting Theory 3 hours. This course places emphasis on the development of accounting theory and its conceptual framework as well as the financial statements, long term assets, long term liabilities and International Financial Reporting Standards. It covers accounting research methodology and theories of the uses of accounting information. The course gives students interested in the CPA FAR examination an overview of major content.

MBA 654 - Business Ethics and Corporate Responsibility 3 hours. This graduate level course provides a foundational perspective for ethical and socially responsible decision-making and management practices in business. Special emphasis is placed on the interrelated nature of ethics, moral, legal, and social issues in managing individuals, groups, and the organizations within a business environment.

MBA 655 - Topics in Advanced Auditing 3 hours. This course places emphasis on the audit decision making process and the interrelationships among the many audit decisions involved in audit planning, audit testing, and the formation of the auditor's opinion. This course gives students interested in the CPA AUD examination an overview of major content.

MBA 657 - Advanced Taxation 3 hours. This course emphasizes a tax planning and decision making approach, with a focus on recognizing the role taxes play in business decisions. The course addresses the tax practice environment, the determination of gross income, employee compensation, business expenses, property acquisition, disposition and cost recovery deductions and tax-deferred exchanges. The course also focuses on the taxation of corporations, sole proprietorships and flow through entities as well as the taxation of individuals and wealth transfer issues.

MBA 661 - Creativity and Innovative Thinking 2 hours. In this course, we examine the concepts of creativity and innovation: what they are, how they impact businesses, how to bring them to your business enterprise. The main object is to teach you how to be creative - how to 'unleash' the right side of your brain.

MBA 674 - Business Analytics 3 hours. This course focuses on the concepts, components and tools required to understand business analytics in organizations and to develop skills needed to effectively use data, and analytic models and results in making business decisions. Emphasis is placed on application of concepts and working with data and software to analyze real business problems.

MBA 681 - Business Sustainability 3 hours. This course is intended as an introduction to the concepts of business and sustainability. The goal is to provide students with a broad knowledge of the stakeholders, issues, public policies, and concepts involved in this topic, while also providing opportunities to study some of these issues in-depth.

MBA 685 - Internship 3 hours.

MBA 699 - Business Consulting Capstone 3 hours. Students fill the role of a consulting team and work with current issues as identified by client organizations. This course presents, evaluates, analyzes and discusses what it means to be a professional consultant. We explore the different aspects of being a consultant and prepare the students for additional career pathways as either entrepreneurs with their own businesses or working within a large corporation or non-profit organization.

Courses Offered by The Kazuo Inamori School of Engineering

Ceramic/Materials/Glass Engineering and Science

CEMS 500 - Special Topics 2-4 hours. The course covers advanced topics which are not ordinarily covered in detail in the general curriculum, but are either current areas of faculty research or areas of current or future industrial interest.

CEMS 501 - Solid State Physics 3 hours. This course discusses the microscopic origins of the physical properties of solids. The focus is on the atomic lattice and associated mechanical, thermal and dielectric properties; energy band structure; the electronic properties of metals, semiconductors and insulators; magnetic properties; optical properties; superconductivity; and the dielectric, ferroelectric and piezoelectric properties of insulators.

CEMS 502 - Quantum Mechanics I 3 hours. This course presents Schrodinger's theory of quantum mechanics with applications to atomic systems. Includes origin of the quantum theory, wave-particle duality, approximation methods, and time-dependent problems. Emphasis is placed upon a thorough grounding in the concepts and techniques, which is then applied to diverse phenomena of importance to ceramics and to solid-state chemical physics.

CEMS 503 - Thermodynamics of Materials 3 hours. This course seeks to advance the students' understanding of classical and statistical thermodynamics as applied to materials systems as well as to expand students' ability to solve advanced thermodynamic problems. This course will cover classical and statistical thermodynamics as related to solution theory, phase equilibria, phase transformations, surface thermodynamics, and defects.

CEMS 504 - Kinetics and Non-equilibrium Processes in Material 3 hours. This course seeks to provide students with an advanced understanding of kinetics and non-equilibrium processes in materials. Topics will include the phenomenological and atomic theory of diffusion, kinetics of solid-state reactions, and diffusional and diffusionless phase transformations. Applications of the course materials to materials research problems will also be discussed.

CEMS 505 - Defects and Defect-related Processes 3 hours. This course discusses the nature and behavior of defects (including point, line and planar, etc.) in ceramics. The relationship of defect properties to such basic processes

as mass transport diffusion and conductivity is considered. The discussion will largely be at an atomistic level and will cover non-stoichiometry, and the role of impurities in phenomena such as grain-growth and sintering.

CEMS 506 - Advanced Engineering Mathematics 3 hours. The classical partial differential equations of physics; the heat equation; the wave equation (vibrating strings and membranes); Laplace's equation. Includes orthogonal sets of functions, Fourier series, separation of variables, Sturm-Liouville problems boundary value problems and the Fourier integral.

CEMS 507 - Quantum Mechanics II 3 hours. Continuation of Quantum Mechanics I. Focuses on the applications of quantum mechanics postulates to real systems. Time independent perturbation theory is developed as are nonperturbative techniques such as variational theory. These ideas are applied to real atoms, molecules, metals, etc. Time dependent perturbation is also constructed and applied to electrodynamics. Non relativistic quantum electrodynamics is then applied to realistic systems. Prerequisite: CEMS 502.

CEMS 508 - Physics of Glass 4 hours. This class is a rigorous introduction to the physical principles and concepts behind glass. After developing the statistical mechanics required for the study of glass, the role of the structure function and the pair distribution function in determining the structure of glass is examined in detail. Several glass networks are selected as representative systems. Viscoelastic theory and relaxation behavior are studied as are the traditional methods for measuring the viscosity of glass forming systems. The thermodynamics of glass transition are examined using energy and enthalpy landscapes. Temperature dependent constraint theory is applied to several systems.

CEMS 510 - Advanced Ceramic Processing 3 hours. This course provides a review of all relevant issues concerning the processing and sintering of advanced ceramic materials - discussing powder preparation and characterization, colloidal and sol-gel techniques, powder consolidation and forming, sintering theory and practice, and microstructure evolution. The course shows the importance of each step, and the critical interconnections among the steps, in the overall fabrication of ceramics; focuses on the formation of ceramics by firing consolidated powders; reveals which ceramic manufacturing methods are easier to employ and why; covers the properties of colloidal suspension; elucidates the liquid-phase sintering and vitrification; describes the role of solid solution additives in the sintering of ceramics; considers the densification of amorphous materials that can crystallize during firing; and more.

CEMS 511 - Science of Whitewares 3 hours. The science and technology of whitewares (i.e. primarily stonewares and porcelains) covering mineralogy, raw material characterization, mixing, rheology and plasticity, forming processes, drying, firing, phase equilibria, thermal stress evolution, microstructural characterization, physical properties, and glazing. Special emphasis will be given to

colloidal science and its application to clay materials, the impact of particle-particle interactions on suspension rheology, plasticity, and particle packing, and to the application of phase equilibria to the microstructural evolution in whiteware bodies.

CEMS 512 - Colloids and Interfaces 3 hours. This course will develop a fundamental understanding in several areas of colloidal and interfacial chemistry that are important in the modern processing of fine ceramics, adsorption from solution, wetting, dispersion and stability of suspensions, sedimentation, osmosis effects, rheology, light scattering, emulsions, and gels, and how those principles apply to modern ceramic processing.

CEMS 520 - Optics and Photonics 3 hours. The focus of this course is the foundations of linear optics leading to detailed exploration of electronic and vibrational processes in different materials and photonics. Advanced topics include femtosecond laser pulses and THz spectroscopy. Format consists of lectures and hands-on laboratory for research/measurements.

CEMS 530 - Advanced Properties 3 hours. Physical and mathematic presentation of material properties and their relation to the symmetry of crystals, ceramics, glasses, and isotropic materials. Presentation of properties in both matrix and tensor forms. Properties include linear and non-linear equilibrium properties (e.g., permittivity, stiffness, permeability, piezoelectricity, electro-optic and magneto-optic) and transport properties (e.g., diffusivity, electrical conductivity). Inter-relationship of properties using Maxwell Relations and thermodynamics.

CEMS 531 - Advanced Solid State Chemistry 3 hours. This course explores, in detail, the relationship between structure, stoichiometry, and properties of solid materials. The subject is approached through a thorough discussion of symmetry (both point and space groups) and crystal chemistry.

CEMS 532 - Atomistic Computer Modeling of Materials 3 hours.

CEMS 533 - Statistical Experimental Design 3 hours. Following a review and extension of ANOVA and regression, experimental design is introduced as an extension of statistical methods. Various standard designs and their analysis are introduced and applied to research and quality control situations. Factorials, fractional factorials, response surface designs and mixture designs are covered. Statistical process control, control charts, and optimization are introduced. Computer methods will involve some standard packages such as SPSS, JMP, IMSL on the mainframe, or software packages on computers in the College micro-computer labs.

CEMS 538 - Material Surfaces and Thin Films 3 hours. This course focuses on the fundamental structure/properties, related processes, and characterization of material surfaces and thin films. Surface structure and processes will then be

applied to examine practical aspects of thin film deposition, functionality, and characterization.

CEMS 543 - Analytical Electron Microscopy 3 hours. This course covers the principles behind and practical uses of electron microscopy in materials research, including electron microscope-based analytical techniques. There is hands-on laboratory instruction in scanning electron microscope operation for ultimate application in students' thesis work.

CEMS 544 - Structure and Characterization of Glasses 3 hours. This course provides a general review of techniques for the characterization of glasses and glass-ceramics. Characterization is taken to include atomic and molecular composition and distribution (intrinsic and extrinsic species), morphology, phase (vitreous and crystalline) identity and concentration, thermal history, and properties which are commonly used to establish reproducibility of glass compositions. Techniques considered will include microscopy, x-ray analysis, spectroscopy, qualitative and quantitative chemical analysis, thermal analysis, surface analysis and profiling, and property measurements. Discussions include the principles behind each measurement, the equipment used, and the possible sources of error. Both qualitative and quantitative analysis are included wherever applicable.

CEMS 545 - Characterization in Materials Science and Engineering 3 hours. The course will provide the student with detailed knowledge of the interactions of electromagnetic radiation with matter. Particle probes used in materials characterization will also be considered. A theoretical approach to understanding the mechanisms of interaction will provide the foundation for understanding any of the plethora of materials characterization techniques, including capabilities and limitations.

CEMS 550 - Independent Study 1-6 hours.

CEMS 562 - Immunology 4 hours. In this course students learn what makes up the immune system, and how it works in keeping us healthy. We'll also look at some of the more complex issues surrounding the immune system such as vaccination, autoimmune disease and transplantation. Upon completion of the course students will be able to name and describe the cells and organs of the immune system and understand the function of each. Students will also be able to describe the normal processes of immunity and regulatory controls, explain the results of immune component deficiencies and understand how normal immune function can cause disease.

CEMS 564 - Biochemistry: Proteins and Metabolism 4 hours. Properties, biosynthetic pathways, and metabolism of carbohydrates, lipids, and nitrogenous compounds with related units on physical biochemistry, protein structure, bioenergetics and enzyme kinetics. Laboratories reinforce theoretical concepts and provide hands-on experience with modern biochemistry techniques and instrumentation. Three lectures and one three-hour laboratory.

CEMS 565 - Biochemistry: Nucleic Acids 4 hours. This course surveys the molecular biology of the gene. Discussions of the latest paradigms for nucleic acid structure and function are presented. Topics include: regulation of DNA replication and transcription, post-transcriptional modification of RNA, chromatin structure, recombinant DNA techniques, functional genomics, and the latest genetic engineering methods. Four lectures with one reserved for discussion of current research publications.

CEMS 566 - Skeletal Tissue 3 hours. The skeleton contains 206 bones that provide strength and rigidity yet allow flexibility. However, bone can fail as a result of both disease and insult. In this course we study the hierarchical structure of bone, how disease affects it and, subsequently, its repair both medically and surgically. Offered every year.

CEMS 568 - Biomedical Materials 3 hours. This course introduces the fundamental concepts and theories behind the choice of material for biological applications. Metals, polymers, ceramics and composites are covered. It brings together biology and materials science to get a better understanding of fundamental interactions that control the applicability of materials. Case studies of present material applications are used to illustrate the principles taught.

CEMS 575 - Biocompatibility 3 hours. This course focuses on the application of materials to restoring human anatomy which has been compromised due to disease or trauma. This lecture series looks at how synthetic and natural materials restore body function and how they interact with host tissues, including materials science, surface interactions, and medical procedures.

CEMS 680 - Graduate Thesis 2-15 hours.

CEMS 685 - Graduate Internship 1-4 hours. Off-site internships with industrial, government or academic research laboratories are required for a minimum of 2 months. Funding will be provided by either the collaborating institution or the School. Examples of current contacts include Affymetrix, Arrow International, Cambridge Scientific, Food and Drug Administration, Orthovita, Owens Corning Fiberglass, U.S. Biomaterials, U.S. Surgical, Wilson Greatbatch, and Zimmer. We also have strong ties with international universities and companies; for example, we currently have internships available at the University of Modena in Italy.

Electrical Engineering

ELEC 500 - Topics in Electrical Engineering 2-4 hours. Special topics in electrical engineering which vary from year to year.

ELEC 531 - Wind Energy 3 hours. The primary objective of this course is to gain an elementary familiarity with wind energy. After a brief review of power and energy, wind energy is introduced. Topics of discussion include history and evolution of wind energy technology, power in the wind, wind turbines, components and operation of typical

wind systems, small scale hybrid energy systems, markets, demand, and resources. The course also includes a class project.

ELEC 532 - Solar Energy Systems 3 hours. In this course we study solar radiation, theory of light, topics of heat transfer associated with solar energy, radiation characteristics of materials, collectors, energy storage, solar loads and the economics. The physics of voltaic systems will also be discussed. This course includes a design project.

ELEC 541 - Energy, Renewables and the Environment 3 hours. The main objective of this course is to gain an elementary familiarity with energy, covering the concept, forms, resources, and its impact on the environment, all with an emphasis on the renewables. We discuss physics of energy, its different forms--mined and otherwise, the Sun, the Earth and the environment. The course includes a number of field trips.

ELEC 550 - Independent Study 1-4 hours.

ELEC 561 - Power Electronics for Renewable Systems 3 hours. This course is an introduction to power electronics with emphasis on applications such as energy conservation and renewable energy. Topics include introductory switching devices, devices for power electronics, and converter design and simulation. Basic concepts of DC-DC converters in continuous and discontinuous modes are included, along with design for motor drives and transformer-isolated switch-mode power supplies.

ELEC 571 - Genetic Algorithms 3 hours. Genetic Algorithms, GA, is a collection of search and optimization techniques that function according to the evolutionary processes. Simple GA, classifier systems, GA with variable population size, and GA in machine learning context are introduced. Also, selected applications in optimization techniques and prediction methods are discussed. This is a project-oriented course. Students should have knowledge of C++, MATLAB, or a similar programming language.

ELEC 574 - Electric Machinery 3 hours. Engineering electromagnetic theories, in particular magnetic theory and circuits, three phase circuits, electro-mechanics, electric energy to mechanical energy conversion, applications of phasors, transformers, motors, generators, power electronics devices and controls.

ELEC 586 - VLSI Design 3 hours. Design of VLSI circuits concentrating on CMOS technologies. Logic design, fabrication principles, CAD layout and introduction to VLSI systems architecture. Structured design emphasis will be with the concept of hierarchy. Design methodology will focus on design of VLSI subsystems using advanced hierarchical design tools including Verilog HDL. This will be in the form of class homework and short projects.

ELEC 680 - Graduate Thesis 2-15 hours.

ELEC 685 - Graduate Internship 1-4 hours.

ELEC 699 - Master's Project 3 hours.

Engineering

ENGR 500 - Special Topics in Engineering 2-4 hours. The course covers advanced topics which are not covered in detail in the general curriculum.

ENGR 550 - Independent Study 1-4 hours.

ENGR 584 - Optimization Methods in Engineering 3 hours. In this course we study optimization as an engineering design tool. Topics covered include nonlinear programming, computational techniques for unconstrained and constrained problems, conjugate gradient, feasible directions methods, and design applications.

ENGR 660 - Research Seminar 1 hour. Students choose thesis areas and prepare literature surveys as part of the course. Required of all new graduate students.

ENGR 680 - Graduate Thesis 2-15 hours.

ENGR 690 - Graduate Seminar 0 hours. Weekly lectures and discussions with visiting lecturers, faculty members, and graduate students. Required of all graduate students throughout their residence.

ENGR 699 - Master's Project 3 hours.

Mechanical Engineering

MECH 500 - Topics in Mechanical Engineering 2-4 hours. The course covers advanced topics which are not ordinarily covered in detail in the general curriculum, but are either current areas of faculty research or areas of current or future industrial interest.

MECH 515 - Mechanical Vibrations I 3 hours. Harmonic oscillator; response of damped linear systems; multi-degree of freedom systems; introduction to vibrations of continuous systems.

MECH 517 - Introduction to Finite Element Analysis 3 hours. Use of the finite element method to solve problems in the areas of stress analysis, heat conduction, and fluid flow. Weighted residual and variational approaches, shape functions, numerical integration, and the patch test.

MECH 520 - Statistical and Thermal Physics 3 hours. This course deals with the various aspects of macroscopic thermodynamics and describes these statistically in terms of microstates of systems.

MECH 522 - Control Systems 3 hours. Linear feedback control system modeling, analysis, and controller design. Design of state variable systems: controllability and observability, and pole placement using state feedback. Robust control systems: system sensitivity, analysis of robustness, and system with uncertain parameters.

MECH 524 - Advanced Fluid Mechanics 3 hours. Advanced topics in Fluid mechanics: compressible flows, boundary layers, potential flow, and turbomachinery.

MECH 534 - Heating, Ventilation, and Air Conditioning 3 hours. Applied engineering thermodynamics; psychometrics; humidification and dehumidification processes; air cooling processes, heating processes; heat vapor transmission, fluid flow and pressure losses; air conveying and distribution.

MECH 535 - Thermal Systems 3 hours. Principles of thermodynamics, fluid mechanics, and heat transfer are applied to the analysis, design, and computer simulation of thermal systems. Types of systems include power plants, heating and air conditioning, heat exchangers, and piping systems.

MECH 538 - Alternative Vehicle Energy Control and Powertrain Design 3 hours. In this course we explore the design fundamentals of alternative energy vehicles including electric and hybrid vehicles. Topics covered include power electronics, power systems, drivetrain, component modeling, battery systems, supervisory control and fault diagnosis. We rely heavily on model-based design including Simulink, with an emphasis on electric and hybrid vehicles.

MECH 550 - Independent Study 1-4 hours.

MECH 586 - Modeling and Simulation of Dynamic Systems 3 hours. Mathematical modeling of physical systems and simulation of linear system responses. System response to varied inputs are studied using classical techniques. Laplace transforms and modeling and simulation software.

MECH 680 - Graduate Thesis 2-15 hours.

MECH 685 - Graduate Internship 1-4 hours.

MECH 699 - Master's Project 3 hours.

Courses Offered by The School of Graduate & Continuing Studies

Care Management

CARE 602 - Foundations of Care Management 3 hours. This course introduces students to the knowledge areas in patient care management. Topics include impact of interactions between support systems, impact of health status on behavior and emotions, HARP assessment, development of patient care plans, coordinating interdisciplinary teams, reimbursement through health and other insurance, budgeting and cost-benefit analysis, chronic health issues or disabilities, functioning in daily instrumental activities, services available to enhance functioning, and understanding housing options for individuals with chronic health and mental health issues.

Counseling

COUN 600 - Special Topics in Counseling 1-3 hours.

COUN 602 - The Professional and Ethical Foundations of Counseling 3 hours. This course helps students develop

their professional identity and understand ethical behavior as counselors. Areas explored include professional roles, settings, functions, goals and objectives, organizations, history, ethics, and credentialing.

COUN 603 - Foundations of Mental Health Counseling 3 hours. This course is designed to familiarize students with the roles and functions of mental health counselors in the contemporary mental health system. Students learn about the history and organization of mental health services, models of service delivery, multicultural factors, systemic issues, advocacy for the mentally ill, legal and ethical guidelines, and issues related to diagnosis and treatment, as well as learning basic interview skills.

COUN 604 - Foundations in School Counseling 3 hours. This course focuses on current guidance and counseling issues that are important to beginning school counselors. Examples of such issues include the CSE and IEP planning, course scheduling, working with BOCES, and managing time constraints. Prerequisite: COUN 602 and 636.

COUN 605 - Career Development and Life Planning 3 hours. Students learn how career development theories, occupational and educational information, vocational tests, sociological and economic factors, and family dynamics all relate in helping their clients to make career and life style career decisions. Students also spend time practicing skills directly related to career counseling. Lab fee required.

COUN 606 - Human Development: The Lifespan 3 hours. This course acquaints the student with the interplay of psychodynamics, behavioral, sociocultural, cognitive and interpersonal theories of development. These factors are examined as they combine to explain personality and cognitive functioning across the life span. The student will learn to relate development theory and research to professional practice in educational and clinical settings.

COUN 615 - Psychopathology and Differential Diagnosis 3 hours. This weekly course is designed to familiarize the students with the latest system of diagnosis and with etiology and general treatment issues for various psychological disorders. The students will learn differential criteria for diagnosis, multicultural factors, systemic issues, legal and ethical concerns, intake and information gathering skills, and basic psychopharmacological information pertinent to mental health diagnosis and treatment. The course focuses on disorders that present with frequency to mental health counselors, including: mood disorders, anxiety disorders, substance use disorders, and impulse control disorders.

COUN 616 - Mental Health, Exceptionality, and Disability 3 hours. This course covers the range of physical, cognitive, communication, and social/emotional exceptionalities in human development from childhood to early adulthood. One focus will be on understanding mental health and psychopathology from the perspectives of risk and resilience. A second focus is on understanding the commonalities, not just the differences, between children and youth with disabilities and their non-disabled peers.

COUN 619 - Program Development and Grantsmanship 3 hours. This course will introduce students to fundamentals of program development and grantsmanship in the counseling field. Emphasis will be on techniques of successful proposal writing, funding opportunities at the local/state/federal level, grant administration, and building programs through collaborative teams of faculty, students, and school and agency personnel.

COUN 626 - Assessment in Counseling 3 hours. This course teaches students how to effectively evaluate the usefulness of tests and inventories and how to integrate testing into the counseling process. Such measurement issues as reliability, validity, and standard error of measurement are covered. Students also become familiar with the most frequently used personality, educational, clinical, intelligence and special population instruments, as well as testing ethics. Time is spent practicing test interpretation with other students. Lab fee required.

COUN 628 - Assessment in Mental Health Counseling 3 hours. The focus of this course is the administration, interpretation and reporting of assessment instruments commonly used in mental health settings. Instruments covered include omnibus rating scales, standardized personality scales, anxiety scales, and ADHD scales. Use of scales to provide data for psychiatric diagnosis is emphasized. Lab fee required.

COUN 636 - Principles of Counseling 3 hours. This course focuses on teaching students the process and theories of counseling. Students also spend time practicing skills directly related to the helping process.

COUN 638 - Advanced Counseling Theory and Practice 3 hours. This course emphasizes the integration, by the student, of counseling theory and counseling practice. The aim is an expansion of both knowledge and skill. Counseling theories will be studied in light of their applicability to skill development. Prerequisite: COUN 636.

COUN 639 - Group Counseling 3 hours. This course emphasizes the understandings and skills necessary to plan, organize, lead, and evaluate counseling groups. Attention is given to recent research and current issues related to groups in the helping professions. Students need access to counseling groups at the time of the course.

COUN 641 - Counseling Special Populations 3 hours. This course addresses formulation and application of research-based effective interventions with particular presenting concerns that often present challenges to the mental health counselor. Some of these presenting concerns include: bereavement, bipolar disorder, schizophrenia spectrum disorders, eating disorders, sex offenders, personality disorders, and substance abuse. Students have the opportunity to discuss difficult cases they are currently seeing and develop individualized treatment plans with appropriate outcome benchmarks based on best practices guidelines.

COUN 642 - Multi-Cultural Counseling 3 hours. An exploration of the considerations and issues involved in counseling persons from different cultural, religious, racial-ethnic, and gender/gender oriented groups. There is a focus on heightening an awareness and appreciation of difference.

COUN 646 - Consultation and Prevention 3 hours. This course covers the concepts and practice of consultation in educational and human service settings. Emphases are on mental health and behavioral consultation including child-centered, teacher-centered and system centered techniques. This course has a practicum component. Prerequisite: PSYC 638 or COUN 638. (Cross-listed as PSYC 646)

COUN 649 - Evidence-Based Interventions in Schools 3 hours. This course focuses primarily on evidence-based interventions for specific problems or mental health issues most often encountered by school counselors of elementary and secondary school-age children. Students explore issues relevant to establishing evidence-based practices and learn to select and implement specific efficacious interventions in order to increase the academic performance of the children. Prerequisite: COUN 638.

COUN 650 - Independent Study 1-3 hours.

COUN 652 - Techniques of Family Therapy 3 hours. This course provides a practical introduction to family therapy techniques. Specifically, students are trained in concepts and techniques of structural-strategic family therapy through videotaped demonstrations and simulations. Students also have the opportunity to discuss actual cases as a means of applying family therapy concepts. At the completion of the course, participants should have developed foundation skills for using family therapy interventions.

COUN 657 - Practicum in Counseling I 3 hours. The student is required to spend a minimum of 100 clock hours at a selected school, agency or college/university working under supervision with clients/students. During this time, the student is expected to increase competence in the areas of basic interviewing, assessment, and counseling skills. Furthermore, the student is made more aware of the ethical, legal, and professional issues inherent in the counseling process. The student is provided practical, on-the-job, supervised and evaluated experiences that provide the foundation for internship experiences. A weekly seminar class accompanies the fieldwork experience.

COUN 658 - Practicum in Counseling II 3 hours. This is a continuation of COUN 657, with the exception that the student is required to spend a minimum of 200 clock hours at a selected school, agency or college/university, working under supervision with clients/students. Students continue to develop conceptual and professional skills related to their practice at a field site. Again, a weekly seminar class accompanies the fieldwork experience. Prerequisite: COUN 657.

COUN 660 - Special Practicum I 1-3 hours.

COUN 663 - Internship in Mental Health Counseling I 3-9 hours. This is a continuation of COUN 666. Students spend time at an approved mental health setting working with clients under the supervision of a licensed mental health clinician. Students continue to develop conceptual and professional skills related to their practice at a field site. A weekly seminar class accompanies the fieldwork experience. Over the course of a minimum of two semesters (Internship I and II), students must accumulate at least 600 total hours and 240 direct service hours, distributed equivalently across both semesters.

COUN 664 - Internship in Mental Health Counseling II 3-9 hours. This is a continuation of COUN 663. Students spend time at an approved mental health setting working with clients under the supervision of a licensed mental health clinician. Students continue to develop conceptual and professional skills related to their practice at a field site. A weekly seminar class accompanies the fieldwork experience. Over the course of a minimum of two semesters (Internship I and II), students must accumulate at least 600 total hours and 240 direct service hours, distributed equivalently across both semesters.

COUN 666 - Practicum in Mental Health Counseling 3 hours. The student is required to spend a minimum of 100 clock hours (40 direct contact hours) at a selected clinical mental health setting working under supervision with clients. The student is expected to increase his or her competence in the areas of basic interviewing, assessment, and counseling skills. Furthermore, the student is made aware of the ethical, legal, and professional issues inherent in the counseling process. A weekly seminar class accompanies the fieldwork experience, which focuses on discussion of the theory and practice of supervision vis-a-vis the practicum.

COUN 667 - Internship in Mental Health Counseling 3-9 hours. The student experiences the actual counseling practice by performing a wide range of counselor functions and activities in a field-training site. The site may be a social service agency, mental health clinic, veterans counseling service, or any other approved counseling setting. Site supervision is provided by a certified or licensed field supervisor. The student is expected to spend four full days each week at the site (400 clock hours), in addition to participating in a regular seminar on campus. Prerequisite: Satisfactory completion of qualifying examination.

COUN 668 - Internship in School Counseling I 3-6 hours. This is a continuation of COUN 657. Students spend time at a selected school working with students under the supervision of a permanently certified school counselor. Students continue to develop conceptual and professional skills related to their practice at a field site. A weekly seminar class accompanies the fieldwork experience. Over the course of a minimum of two semesters (Internship I and II), students must accumulate at least 600 total hours and 240 direct service hours, distributed equivalently across both semesters. Prerequisite: COUN 657.

COUN 670 - Internship in School Counseling II 3-12 hours. This is a continuation of COUN 668. Students spend time at a selected school working with students under the supervision of a permanently certified school counselor. Students continue to develop conceptual and professional skills related to their practice at a field site. A weekly seminar class accompanies the fieldwork experience. Over the course of a minimum of two semesters (Internship I and II), students must accumulate at least 600 total hours and 240 direct service hours, distributed equivalently across both semesters. Prerequisite: COUN 668.

COUN 671 - Research and Statistics 3 hours. The course introduces the analysis of research design and basic statistics and gives the student the background necessary to read and judge professional evaluation research as well as the ability to design and implement basic program evaluation.

COUN 695 - Topics in Counseling 3 hours. This course covers advanced issues encountered in the counseling setting with an emphasis on current trends in the field. Intensive study of research and practice is based on applied issues that arise for the professional counselor. (Cross-listed as CSDV 695)

College Student Development

CSDV 601 - Introduction to Student Affairs 3 hours. This course is an introduction and overview of student affairs functions within institutions of higher education. It emphasizes the history, professional standards and ethics in professional conduct, professional associations, organizational models, practices in a cross-section of functional areas in student affairs and issues and trends in student affairs practice.

CSDV 607 - Foundations of College Student Development

3 hours. This course introduces students to issues and principles of practice in the profession of student affairs. Topics may include developmental growth and identity of college students, using counseling skills in student affairs work, theories of college student development, and leadership and decision-making among college students. Prerequisite: CSDV 601.

CSDV 617 - Exceptionality: College Students with Disabilities 3 hours. The focus of this course is effective service provision for college students with disabilities. Topics include the Americans with Disabilities Act, identification of and intervention with various disabilities, development of systems of support, and faculty consultation.

CSDV 644 - Intercollegiate Athletics in Higher Education 3 hours. This course introduces the role of Athletics in American Higher Education. Students explore issues involving intercollegiate athletics within various levels and types of institutions, including the impact of athletics on college campuses, the role of the NCAA, ethics, governance, and student athlete standards.

CSDV 650 - Independent Study 1-3 hours.

CSDV 657 - Practicum in College Student Development 3 hours. In this practicum the student spends a minimum of 100 clock hours at a selected college or university student affairs office prior to their internship, working under the supervision of a student affairs professional. The experience is geared toward increasing skills, introducing the student to new cultures and environments and allowing the student to explore various aspects of Student Affairs. The student is provided practical, on-the-job, supervised and evaluated experiences that provide the foundation for internship experiences. A weekly seminar class accompanies the fieldwork experience.

CSDV 668 - Internship in College Student Development I 6 hours. The student is required to spend time at an approved student affairs setting working under the supervision of a student affairs professional. Students continue to develop conceptual and professional skills related to their practice at a field site. A weekly seminar class accompanies the fieldwork experience. Over the course of a minimum of two semesters (Internship I and II), students must accumulate at least 600 total hours, distributed equivalently across both semesters. Prerequisites: CSDV 657.

CSDV 670 - Internship in College Student Development II 6 hours. This is a continuation of Internship I. The student is required to spend time at an approved student affairs setting working under the supervision of a student affairs professional. Students continue to develop conceptual and professional skills related to their practice at a field site. A weekly seminar class accompanies the fieldwork experience. Over the course of a minimum of two semesters (Internship I and II), students must accumulate at least 600 total hours, distributed equivalently across both semesters. Prerequisite: CSDV 668.

CSDV 674 - Legal Issues in Student Affairs 3 hours. This course introduces students to current legal issues confronting the student affairs professional. Topics include authority and environment of ethics and law, ethical decision analysis, and topical issues such as student safety, liability, confidentiality, privacy, libel and slander, due process, and other related ethical and legal concepts.

CSDV 695 - Topics in Student Affairs 3 hours. This course covers advanced issues encountered in the student affairs setting with an emphasis on current trends in the field. Intensive study of research and practice is based on applied issues that arise for the student affairs specialist. (Cross-listed as COUN 695)

Education and Special Education

EDUC 600 - Special Topics in Education 3 hours.

EDUC 603 - Competency in the Teaching of Literacy 3 hours. Study of theories of literacy development and strategies appropriate to teaching literacy in the early childhood and childhood classroom. Topics covered include strategies for teaching emergent literacy, word identification, phonics, phonemic awareness, meaning,

comprehension, instructional materials, and identifying instructional needs.

EDUC 604 - Diagnostic and Remedial Techniques in Literacy 3 hours. Provides students with in-depth knowledge of procedures for assessing specific literacy problems, and strategies for the correction of reading difficulties of students within a broad range of disabilities. At the conclusion of this course, teachers should be able to administer and interpret several diagnostic instruments and communicate these results to parents and be able to design literacy programs at all areas of literacy at the early childhood and childhood levels. Pre- or co-requisite: EDUC 603. Field component required.

EDUC 605 - Literacy in the Content Areas 3 hours. The emphasis is on the application of literacy to subject area learning. It takes a balanced approach, providing a realistic and practical treatment of literacy as related to text review. Literacy strategies in content areas and study techniques are examined.

EDUC 613 - Literature for Children 3 hours. A practical approach to the study and selection of children's books. The riches of classical and contemporary writings are overviewed for classroom use. Various approaches to working with children and books are introduced as well as how literature can be integrated into the early childhood curriculum.

EDUC 620 - School Violence Prevention and Intervention Workshop (SAVE) 0 hours. This workshop provides teacher candidates with training in school violence prevention and intervention. Topics include: the warning signs that relate to violence or signal precursors to violent behavior in children; the statutes, regulations and policies relating to a safe, nonviolent school climate; academic supports and management strategies that promote a nonviolent school climate; methods for integrating social skill development and problem-solving skills into ongoing curriculum and instruction; intervention techniques for addressing violent situations; and, referral processes for students with violent behaviors. This course must be completed prior to student teaching.

EDUC 621 - Child Abuse Identification and Reporting Workshop 0 hours. This workshop is approved by, and designed to meet certification regulations of, the New York State Education Department (NYSED). The workshop includes objectives related to detecting and reporting child abuse; meeting professional and legal responsibilities related to child abuse; strategies for preventing child abduction. This course must be completed prior to student teaching.

EDUC 622 - Dignity for All Students Workshop (DASA) 0 hours. This workshop fulfills the training requirement on harassment, bullying, and discrimination prevention and intervention under the NYS Dignity for All Students Act. This is a participatory workshop which includes activities to help students understand and address personal and hidden biases as well as related behaviors and the school setting.

Topics include: introduction to the Dignity for All Students Act and reporting requirements for educators and more. This course must be taken prior to student teaching.

EDUC 650 - Independent Study 1-4 hours

EDUC 670 - Literacy Seminar and Field Experience 6 hours. Emphasis is placed on the selection of literacy materials, grouping practices and literacy strategies for small and large groups in a public school setting. This experience coordinates the literacy curriculum with various school personnel and stresses the development of parental programs at the early childhood and childhood levels.

EDUC 688 - Teaching in the Adolescent Classroom 3 hours. This course reviews human development during adolescence with an emphasis on families, schools and the cultural contexts of adolescent development. Building upon this understanding, students will explore in depth the curriculum and instruction of the adolescent learner. Discussion of goals, methods, and materials used to successfully teach adolescent level courses.

EDUC 695 - Master's Research 3 hours. Designed to be a culminating project for those who have completed the majority of coursework in the program. May be designed with special research or practical orientation.

Special Education

SPED 600 - Topics in Special Education 3 hours.

SPED 640 - Multimodal Literacy in the Inclusive Classroom 3 hours. This course examines an expanded definition of "text" to include multimedia and visual texts. Using formal and informal assessment tools and assistive technology, methods of teaching literacy skills to SWD across content areas is taught.

SPED 645 - Teaching Students with Learning Disabilities 3 hours. This course involves a study of a range of learning disabilities. Historical, philosophical and legal, foundations provide context for the examination of specific instructional strategies linked to the learning processes of students with learning disabilities.

SPED 650 - Independent Study 1-4 hours.

SPED 656 - Teaching Students with Disabilities in Inclusive Classrooms 3 hours. This course involves understanding the characteristics of the range of disabilities, and specific instructional strategies and methods linked to learning processes and human development. Historical, philosophical, legal, cultural and ethical foundations of educating students with disabilities are examined.

SPED 658 - Managing Students with Disabilities in an Inclusive Classroom 3 hours. This course involves understanding the effects of classroom environment on student behavior and the development of positive behavioral supports including problem solving and conflict resolution strategies. Assignments include behavioral observation, assessment and intervention.

SPED 669 - Field Experience in Inclusive Teaching 3 hours. The field experience integrates literacy instruction and special education, highlighting means of supporting students who are struggling readers and students whose literacy problems may be rooted in mild to moderate disability. Each student is required to complete a minimum of 100 hours of field experience in B-6 literacy and special education settings. Fifty hours targets literacy instruction and 50 focuses on special education. Students are observed by university faculty, document field hours with cooperating teachers, complete specific course assignments within the field placement, and participate in a seminar. A program portfolio is the culminating assignment.

SPED 670 - Special Education Practicum 3 hours. This practicum involves understanding the characteristics of children with disabilities and the instructional strategies and methods used to facilitate their learning process. Students complete at least 20 days designing and delivering instruction to children with disabilities at the developmental levels of certification sought. The accompanying seminar provides opportunities for integration of experiences. The graduate program portfolio is a requirement of the course. Pre- or Co-requisites: SPED 645, 656, 658, and 669.

SPED 671 - Assessing and Evaluating SWD 3 hours. This course focuses on the process of identifying, assessing and diagnosing students with disabilities, including selecting, administering and analyzing test data to develop individualized educational plans (IEP's).

Gerontology

GERO 601 - Adult Development and Aging 3 hours. This course serves as an introduction to the major issues and concerns of adult development and aging. We explore the key concepts that underlie adult development and aging as well as examine the research methods used to investigate them. Armed with these tools, we consider several topics of interest including: biological changes, physical and mental health, psychological issues, personality, continuity and change, sociological forces, generational issues, and cross-cultural perspectives in aging.

GERO 604 - Public Policy and Older Adults 3 hours. This course focuses on federal and state legislation, policies and regulations related to services for aging adults. Programs and services that have grown out of legislation, and the regulations that govern them, is a particular area of emphasis.

GERO 606 - Health Care Delivery Systems for Older Adults 3 hours. This course examines various approaches of care for older adults. Topics include assisted living, skilled care, and home-based services. Particular emphasis is placed on the impact of managed care and the Affordable Care Act on senior care.

GERO 608 - Marketing Healthcare 3 hours. The "four Ps" of marketing--product, price, placement and promotion--do not necessarily translate to the world of healthcare, particularly in the current changing environment. This course examines healthcare marketing in the context of a

different set of “P’s”: physicians, patients, payers, public, and politics. Marketing strategies specific to facilities and services for older adults are emphasized.

GERO 609 - Cognition and Aging 3 hours. Is my memory doomed to get worse as I get older? If I lose my keys, is it a sign that I’m getting Alzheimer’s disease? Broadly, this course attempts to answer these questions, as well as those related to normal cognitive changes that our growing senior population faces. Topics include the types of cognitive abilities that tend to decline with age as well as those that remain stable, and current research and theories related to age differences in memory, verbal processes, motor performance, perception, problem solving, language processing, wisdom, creativity, and intelligence.

GERO 611 - Counseling Approaches with Older Adults 3 hours. This course examines counseling and psychotherapy approaches used with aging adults. Particular emphasis is placed on the importance of the therapeutic relationship and understanding of developmental issues of aging adults. Students also examine the latest research on evidence-based approaches that are in current use.

GERO 613 - Death and Dying 3 hours. The class begins with a discussion aimed at defining both death and dying. The perceptions of several cultures are examined. Is it possible for death and dying to become less frightening experiences? Topics explored include the role of grief in society, how different cultures deal with that process among the living, cultural and social expectations related to death and bereavement, and conceptions of the afterlife.

GERO 617 - Mental Health and Wellness with Older Adults 3 hours. This course focuses on specific mental health intervention and prevention services for aging adults. As such, it incorporates a required field experience in a setting that provides services for seniors. This may include retirement, assisted living, and skilled care facilities, and home-based service programs. Particular activities depend on the scope of practice in students’ professional fields. All students are involved in diagnosis and treatment of age-related disorders, intervention, and prevention activities.

Public Administration

PUAD 510 - Principles of Public Administration 3 hours. The course focuses on the theory, principles and practices of the management and operations of the functions of government. This course is the basic introduction to the discipline of Public Administration; its history, its development and its focus on both management principles and policy applications. The fundamental dichotomy of politics and administration will be examined, along with the linkages between the science and administration and how the practice of Public Administration has given rise to the “fourth” branch of American government.

PUAD 528 - Public Sector Budgeting and Accounting 3 hours. This course introduces the theories and skills of public sector budgeting, including financing state and local governments, and examines how the maximization of

societal return from public expenditures has developed in recent years. Skills such as revenue and expenditure forecasting, making adjustments due to uncertainties, and developing realistic alternatives are examined and practiced. Budget formulation and administration are emphasized with a view of providing the student with the basic understanding of constructing and managing a budget in the public and nonprofit sectors.

PUAD 531 - Political Environment of Public and Community Services 3 hours. This course presents an overview of the political framework within which public and community service agencies operate; provides an understanding of some of the problems involved in implementing public service programs through the governmental structure; indicates where and how political decisions are made involving public services; and increases the student's ability to interact with his/her agency's political environment. This course also covers proposed responses to climate change/sustainability issues from a global perspective.

PUAD 535 - Foundations of Health Care Management 3 hours. This course examines a range of contemporary health care delivery issues, notably: the impact of the AIDS and H1N1 crises; the rationing of health care resources in the US; the debate over health care coverage for the elderly; and a comparison of the American health care system with other national systems, with special references to the Canadian approach.

PUAD 537 - Foundations of Non-Profit Management 3 hours. This course builds on the constructs of PUAD 571 and provides an overview of nonprofit agency and charitable organization administration. This includes organizational structure, human resources issues, financing and budgeting with multiple funding sources, Board - staff relations and applicable management principles. Also covered are strategies for effective planning, administration and operations of programs and personnel. A specific focus of the course is public and non-profit agencies that provide services to children and families. This course also examines an array of ethical problems typical of management in human service agencies.

PUAD 541 - Program Evaluation and Grantsmanship 3 hours. This course introduces the analysis of research design and basic statistics and gives community services/public administration personnel the background to read and judge professional evaluation research as well as the ability to design and carry out basic program evaluation. This course also focuses on the role of grants in public and non-profit organizations with emphasis on techniques and resources of grantsmanship and the importance of grants and grantsmanship in the overall scheme of program planning and organization development.

PUAD 542 - Legal Issues in Administrative Law 3 hours. This course provides an overview of legal issues arising in key areas of public administration. Topics include the structure of the American legal system, criminal and civil jurisdiction, and the role of administrative bodies.

PUAD 545 - Legal and Regulatory Issues in Non-Profit Management 3 hours. In this class we examine the distinctions between for profit and nonprofit organizations, with a view toward ensuring that the nonprofit meets the formation and operational requirements to have and remain eligible for IRC Section 501 status. Students are introduced to the practical techniques of filing a Form 1023 or Form 1024, and what an applicant must show in order to receive tax exempt status. Operational issues such as charitable giving rules, the regulation of fund raising, nonprofit employee compensation and risk management and avoiding personal liability are also examined.

PUAD 550 - Independent Study 1-4 hours. Academic inquiry into a particular area not covered in any established course, and carried on outside the usual instructor/classroom setting. A written Plan of Study is required.

PUAD 561 - Organizational Processes 3 hours. This course examines organizational problems in the delivery of human services at the local level including health care, public safety, education, counseling, rehabilitation, information and referral, and legal assistance. Organizational processes are analyzed in relation to the distinct goals and environmental and technological characteristics of client processing organizations.

PUAD 565 - Computer Applications and Management Information Systems for Public Administration 3 hours. The application of computers to administrative problem solving is examined through such topics as the structure and function of computing systems, administrative applications, and the availability of computing resources. This course gives the student a fundamental and theoretical foundation for management information systems.

PUAD 571 - Public Administration and Agency Management 3 hours. This course is intended for those who either are, or who may become, responsible for managing community service/public administration agencies and organizations. The emphasis is on the practical skills necessary for planning, problem analysis, and decision-making.

PUAD 581 - Human Resources Administration 3 hours. This course develops skills for designing and implementing human resource systems and analyzes the importance of human resources to organizational performance of public sector and non-profit organizations. Current issues in human resources management are examined, including hiring, termination, performance evaluation, and the impact of global technology. The legal and regulatory framework of employment practices are investigated with the view of providing students with insight and skills to avoid grievances and legal challenges stemming from employment decisions.

PUAD 590 - Field Work in Public Administration 2 hours. This course is required of students who have not had experience in a public/community service agency. Students intern in a public/community service agency under the guidance of a faculty member and an agency supervisor.

PUAD 597 - Topics in Public Administration 3 hours. In this seminar, which accompanies the culminating Capstone project, we examine professional issues encountered in a variety of public administration settings. Intensive studies of theories, research and practice are based on applied issues that arise for the public administrator professional.

PUAD 598 - Capstone Seminar I 2 hours. This course is the comprehensive examination and is the culmination requirement necessary to complete the Master's degree. Students are introduced to the fundamentals of conducting research; survey, case study, quantitative, etc., data analysis and presentation, conducting the literature review, and written reporting -- all of which are major roles of the public administrator. This project is centered on an analysis of an issue or problem in a field of public administration, policy and/or community services. It involves intensive reflection, research, writing and a poster presentation of a final report with a focus on practical applications that demonstrate the skills developed throughout the program. During this seminar, students identify a project problem or topic and complete a literature review.

PUAD 599 - Capstone Seminar II 1 hour. This is a continuation of the seminar begun during the previous semester. Students proceed to describe the project environment and project approach, develop and present research findings and recommendations, and complete and submit the final document. Prerequisite: PUAD 598.

School Psychology

PSYC 600 - Special Topics in School Psychology 1-3 hours.

PSYC 601 - Foundations of Cultural Diversity 1 hour. As frontline practitioners in schools, human service agencies, and higher education settings, mental health providers are faced with a proliferation of cultural issues on a daily basis. It is essential that mental health providers develop an appreciation for cultural diversity and an understanding of how cultural diversity issues interact with service provision. This course is intended as an introduction to cultural diversity issues and their impact on the major areas of practice within schools, agencies, and higher education. Upon completion of this course, students will have acquired knowledge regarding cultural issues that provide a foundation for exploring these issues in subsequent specialization courses.

PSYC 602 - Seminar in Cultural Diversity 2 hours. This course is an advanced seminar on cultural diversity issues and their impact on the major areas of psychology practice and research. Students will explore these issues in depth and pursue literature research on diversity issues related to their area of specialization.

PSYC 603 - Foundations of School Psychology 3 hours. The theoretical, scientific and practical underpinnings of professional school psychology are covered, with material drawn from both psychology and education. Topics include cognitive, social, emotional, and cultural bases of behavior; educational theory and instructional psychology,

particularly related to basic school subjects (reading, mathematics, and written language); and school psychology as a professional specialty, including history and systems, role and function, models of practice, and current issues with particular attention to practice in a rural setting.

PSYC 606 - Advanced Developmental Psychology 3 hours. An in-depth study of the basic scientific area of human developmental psychology. Considers development across the life span through classical theory and more recent formulations with a focus on empirical research findings. Included are biological, cognitive, social, emotional and cultural factors which influence normal development.

PSYC 607 - Learning and Cognition 3 hours. A study of the basic processes underlying learning, memory and higher cognitive functions such as conceptualization, problem solving and language. Emphasis on the relevance of recent research and theoretical developments in cognitive psychology to school learning. Topics include attention, memory, information processing, problem solving, reasoning, creativity, and experimental paradigms for the study of cognition and learning.

PSYC 608 - Social Psychology and Behavior 3 hours. This course provides a comprehensive background of the predominant models of human personality as formulated by such theorists as Adler, Freud, Jung, Kelly, and Skinner, as well as focus on current research in personality. Such topics as individual differences in traits, cognitive styles, and forms of emotional relatedness are explored and the current controversies regarding the consistency of personality and the question of genetics versus environmental factors in the evolution of human behavior are examined. The interface between pure personality theory/research and its application to social realities and clinical settings is emphasized.

PSYC 609 - Physical Bases of Behavior 3 hours. An overview of basic neuroanatomy and neurophysiology is presented to provide a foundation for understanding the biological bases of human cognitive functioning. Neurologically based problems encountered in the schools are discussed.

PSYC 611 - History and Systems of Psychology 3 hours. This course presents a comprehensive orientation to the science and practice of psychology. Progressing from ancient foundations to the current state of the discipline, the course is designed to illustrate both the continuity and incremental development of psychology as a science and profession. The course content is organized around three major themes: (1) the historical development of the discipline of psychology as a science and profession; (2) the systems, or "schools of thought" that form the foundation of psychology both historically and currently; and (3) the interweaving influence, as well as tensions, between the science and practice of psychology. The goal is for students to further develop their identities as psychologists through an understanding and appreciation of the broad landscape upon which their discipline is constructed.

PSYC 626 - Psychological and Educational

Measurements 2 hours. Basic theory of psychological and educational measurements and the elementary statistics of test score analysis including reliability, validity, item analysis, and scales of measurement. Evaluation and selection of standardized tests is emphasized as well as the theory bases of measurement of individual differences. Observational procedures will also be discussed and implemented.

PSYC 627 - Norm-Referenced Testing I 3 hours. This course focuses on the administration, scoring and interpretation of individually administered norm-referenced instruments. Attention is focused on those instruments related to the assessment of cognitive abilities and learning behaviors of school-aged children. The major purpose is to develop the student's repertoire and mastery with these measures and to increase the students' capacity for evaluation of individual behavior and report writing. Co-requisite: PSYC 626. Lab fee required.

PSYC 628 - Academic Functioning 3 hours. Examines the reading, mathematical and language arts processes and methods of assessing these. A variety of educational assessment techniques are reviewed including norm-referenced tests, curriculum-based approaches, and informal probes, and systems of direct observation. The use of these techniques to assist in the identification of educational difficulties is examined. Approaches to interventions for educational difficulties are surveyed highlighting the link between assessment and remediation.

PSYC 629 - Social-Emotional Assessment 3 hours. This course provides information and training about a variety of instruments and techniques available to assess the psychological status and functioning of persons and systems, with a particular emphasis on children, adolescents, and families. Modern thematic storytelling tests and objective behavior rating scales are highlighted. The course also covers traditional projective approaches, as well as more recently developed techniques involving social skills and family assessment. Important theoretical and measurement issues are discussed as well as ethical concerns. Students are required to practice administration, scoring, and interpretation of many of the techniques discussed. Prerequisite: PSYC 626. Lab fee required.

PSYC 632 - Norm-Referenced Testing II 2 hours. Norm-Referenced Tests II is a continuation of training in the processes of assessment of children's cognitive, achievement, and language development. A variety of norm-referenced instruments will be reviewed, including broad-based comprehensive measures and diagnostic measures, as well as approaches for children from different cultural and linguistic backgrounds. Important theoretical issues in intelligence and research-based practices regarding academic development and assessment will be discussed. While students will be required to practice the administration and scoring of assessment instruments, the main focus of this course will be to develop higher-level interpretive skills and ability to communicate findings effectively in a written format. Prerequisite: PSYC 627.

PSYC 636 - Foundations of Interpersonal Effectiveness 3 hours. This course focuses on the training and practice of personal skills, which are the prerequisites to the functioning as a professional psychologist. Included is the study of theories and research from which those skills are derived. The course includes lectures, behavioral rehearsal and group activities, and involves critical self-examination and peer review. Students must demonstrate adequate levels of interpersonal skills according to the instructor's evaluation, in order to successfully complete the course. Such success is a prerequisite for admission to the Intervention sequence in the School Psychology Program.

PSYC 637 - Introduction to Group Dynamics 1 hour. The focus is on developing an understanding of the group process and its evolution, including basic group concepts and their applications. Students are involved in the process as they experience and then conceptualize group processes. An integral part of the experience is the student's engagement in self-examination. (Cross-listed as COUN 637)

PSYC 638 - Psychotherapy and Behavior Change 3 hours. This course covers a broad range of psychological interventions, with particular emphasis on their applications with children and families. Theory and research in counseling and psychotherapy are covered with emphasis on behavior therapy, cognitive behavior therapy, and behavior modification. Prerequisite: PSYC 636.

PSYC 639 - Exceptionality in Learning and Behavior 3 hours. This course presents the varieties of exceptionality in human learning and behavior. Various psychologically and educationally handicapping conditions are discussed. Classification systems, diagnosis, symptomology, prevalence, incidence, course and treatment are covered with an emphasis on empirical research findings. Professional, societal, and cultural issues in exceptionality provide an important focus for discussion.

PSYC 641 - Introduction to Family Therapy 3 hours. This course is designed to provide a practical introduction to family therapy, including a comprehensive understanding of family structure, development, processes, and assessment in current, historical, cultural, and systemic contexts. Methods for intervention are a major part of the course, including well-established approaches to family therapy along with other evidence-based practices. Prerequisite: COUN/PSYC 638.

PSYC 642 - Clinical Seminar: Advanced Topics in School Psychology 3 hours. This clinical seminar is a multi-purpose course designed to supplement student experiences in the advanced clinic practicum. The primary purpose of the seminar this semester is to provide students with the opportunity to discuss cases with students and supervisors from other practicum sections. These types of discussions are useful for broadening conceptual perspectives and generating a variety of intervention ideas. A second purpose of the course is to provide students with

additional training in areas that are related to direct service provision and integration of such techniques into foundation counseling and assessment approaches.

PSYC 646 - Consultation and Prevention 3 hours. This course covers the concepts and practice of consultation in educational and human service settings. Emphases are on mental health and behavioral consultation including child-centered, teacher-centered and system centered techniques. This course has a practicum component. Prerequisite: PSYC 638 or COUN 638. (Cross-listed as COUN 646)

PSYC 650 - Independent Study 1-3 hours.

PSYC 651 - Academic Interventions 2 hours. This course introduces students to a broad array of academic interventions. During this course students will learn the sequence of development of basic academic skills and how to target academic interventions for students with specific academic needs. There will be special emphasis on reading, writing, and written language interventions. Students will demonstrate their knowledge of the academic intervention process through applied intervention project.

PSYC 656 - Field Experience in School Psychology I 1 hour. Each student is placed in a school district one day each week to develop observation skills, gain exposure to the school as a system, begin to interact and practice testing skills with school-aged children and to become oriented to working in the schools as a school psychologist. On-site field supervisors, as well as program faculty, provide ongoing supervision for this experience. A campus-based seminar provides opportunities for in-depth exploration of issues relating to school functioning.

PSYC 657 - Field Experience in School Psychology II 1 hour. This practicum provides a continuation of skill development within the school setting. Students increase their placements to 1.5 days per week in a school district where they practice testing skills and gain experience utilizing observational techniques and providing targeted interventions. In addition, students also participate in provision of special education services where they gain experience working directly with children with disabilities in an academic setting. On-site field supervisors, as well as program faculty, provide ongoing supervision for this practicum. The practicum seminar covers topics such as multidisciplinary teams, the parent-school relationship, and the impacts of educational disabilities on school functioning.

PSYC 658 - Clinic Practicum I 3 hours. This is a practical course where students apply previous learning and gain experience in assessment and intervention with children and families and school consultation. Team collaboration, peer review and case conferences are essential elements of this course. Students work with actual clients at the Child and Family Services Center under supervision of professional psychologists. Supervision is provided through the use of audiotaping, videotaping and observation through one-way mirrors. Topical seminars are also included throughout the semester. Prerequisites: PSYC 629 and 638.

PSYC 659 - Clinic Practicum II 3 hours. A continuation of Clinic Practicum I where students will be performing the same activities at a higher level of autonomy and independence. Prerequisite: PSYC 658.

PSYC 661 - Advanced Practicum 1-6 hours. This practicum provides additional supervised experiences in assessment and intervention at a site arranged by the student and his/her advisor.

PSYC 664 - Practicum in Academic Interventions 1 hour. Each student will be placed in a school district one half day per week. Students will gain experience developing, implementing, and monitoring academic interventions in consultation with classroom teachers and other school support personnel. In addition, students will be involved in case conferences, peer review, and faculty supervision of their academic intervention and consultation activities. Co-requisite: PSYC 651.

PSYC 667 - Internship in School Psychology I 3-9 hours. The internship is the culminating experience of the School Psychology Program. It provides intensive, supervised experience in the roles and functions of a school psychologist and also a broad exposure to the educational and community environment of the internship site. Supervision is provided by one or more on-site certified school psychologists and by the University supervisor. Prerequisites: Comprehensive examinations and satisfactory progress in the program.

PSYC 668 - Internship in School Psychology II 3-9 hours. A continuation of the intensive field-based internship in school psychology, as described in PSYC 667. Prerequisite: PSYC 667.

PSYC 669 - Pre-doctoral Internship I 3-9 hours. The internship is the culminating experience of the doctoral program in school psychology. It provides intensive, supervised experience in the roles and functions of an applied psychologist working in schools and clinical settings. The internship also provides broad exposure to the educational and community environment of the internship site. Supervision is provided by an on-site licensed psychologist, as well as other appropriately certified school psychologists or credentialed mental health professionals, and by the University supervisor. Prerequisites: Comprehensive examinations and satisfactory progress in the program.

PSYC 670 - Pre-doctoral Internship II 3-9 hours. A continuation of the intensive field-based doctoral internship in school psychology, as described in PSYC 669. Prerequisite: PSYC 669.

PSYC 671 - Statistical Analysis and Research Design I 3 hours. This course emphasizes: (a) the identification and formulation of research problems; (b) the utilization of research design strategies; and (c) an understanding of

appropriate statistics such as one and two way analysis of variance, correlation and regression techniques and their applications.

PSYC 672 - Statistical Analysis and Research Design II 3 hours. Using examples relevant to professional psychology, this course covers advanced issues in research design and analysis. Factorial and non-factorial designs, and single-subject designs are discussed. The statistical tests to be covered include ANOVA, including planned comparisons, and ANCOVA. The course emphasizes the appropriate selection and interpretation of designs and analysis for testing specific hypothesis or for conducting program evaluations. Prerequisite: PSYC 671.

PSYC 673 - Statistical Analysis and Research Design III 3 hours. Using examples relevant to professional psychology, this course covers advanced issues in correlational research design and multivariate analysis. Multiple regression analysis, factor analysis, along with other multivariate statistics are covered. The course emphasizes the appropriate selection and interpretation of designs and analyses for testing specific hypotheses. Prerequisite: PSYC 672.

PSYC 674 - Research in School Psychology 3 hours. This course is specifically focused on the design and evaluation of studies relevant to school psychology. A broad literature is contained within this focus, including that from educational psychology, special education, counseling psychology, clinical psychology, and school psychology itself. Students are expected to apply knowledge and skills learned from previous coursework in this sequence in order to develop their own research plan. Prerequisite: PSYC 672.

PSYC 678 - Research Seminar 2 hours. A series of six research seminars are required for participants in the Powell Academic Leadership Program. These seminars are taken in consecutive semesters and consist of a sequence of supervised scholarly activities resulting in two completed and publishable research products.

PSYC 679 - Pedagogy Seminar 2 hours. A series of four pedagogy seminars are required for participants in the Powell Academic Leadership Program. These seminars provide instruction, mentoring, and supervision for doctoral students acting as teaching assistants and primary instructors in undergraduate and graduate courses.

PSYC 685 - Special Advanced Seminar I 3 hours.

PSYC 687 - Advanced Seminar: Early Childhood Services 3 hours. This course covers issues and topics specifically related to the expanded role of the school psychologist in the assessment and intervention with infants and toddlers. In a combination didactic and seminar format, students are exposed to current theory and research regarding the delivery of services to these children and their families, and are required to think critically about the various topics and issues emerging from this new focus.

A practicum experience in an early childhood setting provides opportunities to practice assessment and intervention skills and a context for application of current research.

PSYC 692 - Supervision and Administration of Psychological Services 3 hours. This course prepares psychologists to function in supervisory and administrative capacities in delivering human services in schools and other child and family-oriented settings. Students become familiar with important issues in these areas and understand organizations from systems perspective. The essential elements and models of effective supervision are also examined.

PSYC 695 - Professional Practice Seminar 3 hours. This course examines the professional, legal and ethical practice of school psychology through lecture, discussion and readings. Focuses on the school psychologist as a systems level facilitator/change agent. Topics include special education regulations, the organization and structure of schools, effective facilitation within the system, ethical guidelines, identification and reporting of child abuse, and related issues. Prerequisite: PSYC 603.

PSYC 699 - Dissertation 1-12 hours.

Registered Academic Programs

The following programs of study are offered by Alfred University. Their Higher Education General Information System (HEGIS) codes are listed to allow cross-reference between Alfred University and other New York institutions. These codes may be requested by state and federal offices when filing for loans and awards.

Note: Enrollment in other than registered or otherwise approved programs may jeopardize a student's eligibility for certain student aid awards.

Program Title	HEGIS Code	Degree/ Award
Accounting	0502	MBA
Biomaterials Engineering	0905	MS
Business Administration	0506	MBA
Care Management	1299	Advanced Certificate
Ceramic Art	1009	MFA
Ceramic Engineering	0916	MS
Ceramics	0916	PhD
College Student Development	0826	MSED
Counseling	0826.01	MSED, Advanced Certificate
Electrical Engineering	0909	MS
Electronic Integrated Arts	1009	MFA
Gerontology Administration & Management	2299.10	Advanced Certificate
Gerontology – Clinical Services	2299.10	Advanced Certificate
Glass Science	0915	MS
Glass Science	0916	PhD
Literacy Teacher: Birth-Grade 6	0830	MSED
Materials Science and Engineering	0915	MS, PhD
Mechanical Engineering	0910	MS
Mental Health Counseling	2104.10	MSED, Advanced Certificate
Painting	1002	MFA
Public Administration	2010	MPA
School Psychology	0826.02	MA, Advanced Certificate, PsyD
Sculpture/Dimensional Studies	1002	MFA