Bachelor of Arts in Computing Resource Guide

Revised: November 1, 2017

BAC Resource Guide Contents

Section One: Getting Started with the BAC Program

<u>**Introduction**</u>

The Bachelor of Arts in Computing (BAC) is a degree offered jointly by the School for New Learning (SNL) and the College of Computer Science and Digital Media (CDM) at DePaul University. This degree has been designed to prepare adults for computer related careers and/or graduate programs in Computer Science or Digital Media. Instituted in 1996, the BAC program has remained on the cutting edge of preparing students to work and study in a variety of technology fields. The program is open to adult students aged 24 or older.

For those who have a great deal of knowledge and background in computing, the BAC program offers the opportunity to fulfill requirements through documentation of that experience and through ongoing projects completed in the workplace. For those who have little experience with computing, all requirements can be completed as coursework. In either case, the BAC offers the flexibility and individualized learning approach of SNL while focusing on the latest technology, theory and content provided by CDM.

BAC students also work with the CDM Professional Advisors to define and plan their Focus Area requirements within the program. Students may elect to design an individualized computing related Focus Area that reflects their unique backgrounds and career interests or they may select from 6 different BAC Specialized Focus Area Tracks offered by CDM. These tracks relate to dynamic and diverse aspects of computer technology and its applications. Students may need to demonstrate or complete certain pre-requisite requirements for some of the Focus Area Tracks depending on the student's entry level of competency in that area.

The BAC program requirements follow a similar format to that of the SNL BA program. The program is competency based, meaning that each student must fulfill a minimum of 50 learning competencies to complete the degree. Some of the competency learning statements are written by the colleges and others are written by the student's academic committee. Competency requirements can be fulfilled through completed course work with a grade of C- or better or through documentation of experiential learning. To qualify for the BAC degree, students must complete at least 5 BAC competencies as CDM courses.

<u>**BAC Advising Services**</u>

As with the SNL Bachelor of Arts program, students work with the SNL Advising Center staff until their academic committees are established. During the Foundations course, BAC students are to apply for a Professional Advisor to be assigned from the CDM resident faculty. Students can discuss learning goals or prior computing experience with their PA or if they are trying to decide to join the BAC program, they can consult with a CDM faculty member by contacting the CDM Advising Center. For information about the non-computing aspects of the BAC program, contact the SNL Advising Services.

For students who do not have their academic committee established, the following resources are available.

For questions about admissions policy or procedures, check the <u>SNL Admissions Website</u>.

For questions about SNL registration or policy, contact SNL Advising Services at 312.362.5445 or <u>snladvising@depaul.edu</u>.

For questions about CDM registration, policy or to contact a CDM faculty or staff member, contact CDM Advising Services at 312.362.8633 or <u>CDMadvising@CDM.depaul.edu</u>.

For questions about BAC policies or procedures, contact the Associate Director of Joint Degree Programs at 312.362.5794 or <u>kskorupa@depaul.edu</u>.

CDM Course Registration Procedures

BAC students can register for CDM courses using their Campus Connect credentials directly during any open registration period or can submit their registration to the SNL office to be processed. CDM advisors can register BAC students but will only do so in special circumstances such as adding a student to a closed course.

Registration information for CDM courses is found at the CDM website. All course descriptions, registration numbers, dates, meeting times and syllabi are found on the CDM website under course schedules. Links to course information for courses in the Specialized Focus Area Tracks are found in this document below.

CDM Closed Class Policy: CDM does not allow enrollment in closed courses. Students wishing to enroll in a closed course may elect to add themselves to the course waitlist in campus connect. The waitlist allows students to be auto-enrolled in a class as seats become available. Auto-enrollment from the waitlist occurs hourly during the first week of enrollment and two times per day until the last day to add a class.

Students are strongly encouraged to closely monitor their email accounts if they have any waitlisted courses. All waitlists expire after the last day to add a class each term. Special Note: Students are NOT allowed to sit in on a class after the first week if they are not on the class roster.

BAC Academic Committee Functions

PAs in the BAC program serve the same roles and functions as PAs in the SNL BA program in terms of assisting students in developing and assessing the Focus Area as a content expert. However, there are some unique and specialized aspects of the BAC PAs and their contributions to students in the program that distinguishes them from other PAs serving SNL BA students.

CDM Resident Faculty: All BAC PAs are resident faculty members from CDM. Since the BAC degree is granted from two DePaul colleges, SNL and CDM, students benefit from the expertise and specialization of both colleges. The CDM faculty members are experts in the field of computer science and CDM is one of the nation's leading computer science colleges. Therefore, the BAC PAs have the most cutting edge knowledge and academic background to guide students into computing related careers.

The PAs in the BAC program have been trained to advise SNL students in the BAC but also advise students in other CDM programs. Therefore, they are familiar with all aspects of the CDM curriculum in addition to their responsibilities in assisting BAC students. BAC PAs help students to develop their learning plans and computing related career goals, develop and assess experiential learning and course transfers and substitutions and assist in navigating CDM policies and procedures.

PA Availability: BAC PAs are available for consultation via telephone and email as well as on campus during regularly scheduled office hours. The CDM Center, 243 S. Wabash, at the Loop campus is the main location for all CDM resident faculty and advising services. As with all program planning, BAC students are to respect the time of their advisors and plan ahead when seeking registration assistance and assessment of work.

PA Responsibilities: The BAC PA's general area of responsibility for student programs relate to the Focus Area competencies, the SW computing requirements including Data Analysis and Network Security, and computing related topics that are applied to the Open Electives. The PA will assist in the planning and assessment of these areas. However, all proposals and first drafts of experiential learning are to be reviewed by the student's Faculty Mentor before being passed to the PA as the second reader. All other aspects of the BAC program are to be addressed by the SNL Faculty Mentor.

Advanced Project Advisor (APA) Responsibilities: The role of the Advanced Project Advisor is to provide specialized assistance to the student with the advanced project. The advanced project advisor is recruited by the student (in consultation with the faculty mentor and/or PA) and will work with the student to develop the proposal, assess the work and complete the advanced project.

BAC Program Chart

[Chart available](#) at the SNL Forms Page

LIFELONG LEARNING AREA (12 competencies)	LIBERAL LEARNING AND ELECTIVE AREA (26 competencies)			FOCUS AREA (12 competencies)
	Arts & Ideas Category	Human Community Category	The Scientific World Category	
L-1: Independent Learning Seminar (2 cr. hrs.)	A&I Elective	HC Elective	SW Elective	F-1: Focus Area Planning
L-2: Foundations of Adult Learning (4 cr. hrs.)	A&I Elective	HC Elective	SW Elective	F 2: Computing Elective
L-3: Civic Engagement	A&I Elective	HC Elective	S2H: Data Analysis I : (IT 223)	F 3: Computing Elective
L-4: Writing to Competency (4 cr. hrs.)	A&I Elective	HC Elective	S1F: Applied Networks & Security (IT 263)	F-4: Computing Elective
L-5: Critical Thinking (4 cr. hrs.)	A4: Ethics in the Contemporary World	H4: Power and Justice	S4: Interconnections in the Natural World	F-5: Computing Elective
L-6: Quantitative Reasoning (4 cr. hrs.)	A-5: Creativity	H-5: Globalization	S-5: Scientific Reasoning	F-6: Computing Elective
L-7: Collaborative Learning	E-1 SNL Advanced Elective		E-2 SNL Advanced Elective	F-7: Computing Elective
L-8: Research Seminar (6 cr. hrs.)	EX-1: Open Elective	EX-2: Open Elective	EX-3: Open Elective	F-8: Computing Elective
L-9: Research Seminar	EX-4: Open Elective	EX-5: Open Elective	EX-6: Open Elective	F-9: Computing Elective
L-10: Externship (6 cr. hrs.)	Students that select the Customized Focus Area Track can develop the Focus Area requirements with their academic committee. Those who select aSpecialized Focus Area Track will have part of their Focus Area displayed as specific requirements.			F-10: Computing Elective
L-11: Externship				F-11: Advanced Project
L-12: Summit Seminar (2 cr. hrs.)				F-12: Advanced Project

BAC Professional Advisor Request Form

Date Submitted:

Name:

Preferred Day Phone:

E-Mail Address:

DePaul ID # (seven digits):

Faculty Mentor:

Select one of the following areas of interest to assist with the assignment of your Professional Advisor. You will be contacted by email with your PA assignment.

_____   Undecided: If you are not sure what topics you would like to develop in your Focus Area, you can select this category to have your Professional Advisor assigned.   You will work with your academic committee to clarify your academic and career goals and may change your Focus Area Track at any time.

_____   Customized Focus Track: This option is available for students to develop an individualized Focus Area that reflects their specialized academic and career goals. Students selecting this option will discuss their learning goals with their academic committee and select a concentration and name the Focus Area. This Focus Area can not carry the title of any of the options listed below as those options have specific requirements associated with them.

For descriptions of the following Focus Area options, please refer to BAC information sources such as the BAC website or BAC Resource Guide.

_____   Computer Science

_____   Information Systems

_____   Information Technology

_____   Interactive and Social Media

_____   Network Technology

_____   Security

Email this form to kskorupa@depaul.edu and your Faculty Mentor.

Section Two: BAC Program Requirements

Developing BAC Focus Area

Customized Focus Track: This option is available for students to develop an individualized Focus Area that reflects their specialized academic and career goals. Students selecting this option will discuss their learning goals with their academic committees and design a special set of learning experiences to address those goals.

Students developing a Customized Focus Track will create a plan to address each of the competencies in the Focus Area and will create a title or name to represent that Focus Area. The title of a Customized Focus Area may not be the same as any title of the Specialized Focus Area Track options offered to BAC students because those options have specific requirements associated with them.

Students may select any combination of CDM courses and/or CDM Certificate programs, transfer courses from other institutions, PA approved SNL computer related technology courses offered for FX competencies, prior experiential learning, or independent learning projects to develop their Customized Focus Areas. However, to qualify for the BAC degree, students must complete at least 5 of their competencies in the BAC program though courses taken from CDM. In addition, all BAC Focus Area competencies must be approved by the student's PA. If completed as course work, students must earn a C- or better to use that title as their Focus Area requirement.

Specialized Focus Area Tracks: The Specialized Focus Area Track options (those other than the Customized Focus Track) are competency based but are represented as course titles and numbers of CDM courses. The courses listed for each track option are the same as those listed as CDM minors. However, these requirements are supplimented by other components of the BAC Focus Area including computing electives and the Advanced Project. Therefore, the Specialized Focus Area Tracks are not minors and are more substantial than an academic minor.

If selecting one of these tracks, students must complete each of the requirements in that track unless a substitution is approved by the student's PA. Students can complete these competency requirements by taking the CDM course, through transfer of an equivalent course taken at another institution approved by the PA, or through experiential learning. However, to qualify for the BAC degree, students must complete at least 5 of their competencies in the BAC program though courses taken from CDM. If completed as course work, students must earn a C- or better to use that title as their Focus Area requirement.

Students are advised to not to begin the Specialized Focus Area Tracks until they are assigned to a PA from CDM to assess their technical capabilities, knowledge and readiness to complete that particular track. Students may be required to demonstrate entry level competency or take pre-requisite courses to prepare them to begin certain track options. If this is the case, students may place these courses in the Open Elective slots or if approved by the PA, into Focus Area computing electives.

Information about the courses listed below can be found at the CDM website. These Focus Area Tracks are subject to change and if so, substitutions can be made with the approval of the PA. The following Focus Area Track options are available to BAC students.

Former BAC Focus Area Track Information: The Specialized Focus Area Track information listed below is current and applies to students entering the program at this time. These track requirements are subject to change and your degree progress report has a list of the requirements that were in place when you began your program. In most cases, if the track has changed or if certain courses are no longer offered, the PA will recommend completing the newer requirement and/or will negotiate the placement of remaining requirements in your program. If you change tracks, your requirements will reflect the courses that are required for that track at that time. It is strongly recommended that you consult with your PA before changing tracks to discuss how it will impact your overall learning goals and the placement of your completed courses.

CDM Course Approval and Grade Requirements:

Competencies completed as CDM course work must be approved by the student's PA to be placed into the Focus Area. Students must earn a C- or better in all CDM courses to be placed in any competency requirement in the program.

Computer Science: This track provides essential training in the foundations of computing, data storage and information processing. With this foundation, graduates of the program can easily adapt to and create new information technologies, new computing paradigms, and new ideas for applying computer systems.

- CSC 243 PYTHON FOR PROGRAMMERS
- CSC 300 DATA STRUCTURES IN JAVA I
- CSC 301 DATA STRUCTURES IN JAVA II
- MAT 140 DISCRETE MATHEMATICS I
- CSC 373 COMPUTER SYSTEMS I
- CSC 374 COMPUTER SYSTEMS II
- Three Computing Electives: Computing course or experience approved by PA.
- FA 303 INDEPENDENT ADVANCED PROJECT
  or CSC 394 SOFTWARE PROJECTS
  or IT 394 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS I
  and IT 395 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS II

Information Systems: This track is devoted to the application of computers and related technologies to address the operational, tactical, and strategic challenges facing business, nonprofit, and government organizations. Students can apply their knowledge of hardware, software, business processes and procedures to help organizations improve performance and meet tactical and strategic goals.

- IS 201 INTRODUCTION TO INFORMATION SYSTEMS
- IS 215 ANALYSIS AND DESIGN TECHNIQUES
- IT 240 INTRODUCTION TO DATABASES
- IS 372 SOFTWARE PROJECT MANAGEMENT
- IS 373 INTRODUCTION TO ENTERPRISE SYSTEMS
- Four Computing Electives: Computing course or experience approved by PA.
- FA 303 INDEPENDENT ADVANCED PROJECT
  or IS 376 INFORMATION SYSTEMS PROJECT
  or IT 394 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS I
  and IT 395 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS II

Information Technology: This is a technical focus that will instruct students in core competencies in the areas of problem solving and programming, networks and communications systems, databases, Internet and Web technologies, security, and project management, along with a foundation in business concepts and technical communication.

- IT 130 INTRODUCTORY COMPUTING FOR THE WEB
- IT 211 INTRODUCTION TO APPLIED PROGRAMMING
- IT 240 INTRODUCTION TO DATABASES
- IT 231 WEB DEVELOPMENT I
- ISM 210 INTRODUCTION TO HUMAN-COMPUTER INTERACTION
- Choose one of the following:
  - IT 212 APPLIED OO PROGRAMMING
  - IT 232 WEB DEVELOPMENT II
  - IT 238 INTERACTIVE WEB SCRIPTING
  - CSC 299: SOPHOMORE LAB IN APPLIED COMPUTING
  - IT 320 CONTENT MANAGEMENT SYSTEMS
- Three Computing Electives: Computing course or experience approved by PA.
- FA 303 INDEPENDENT ADVANCED PROJECT
  or CSC 394 SOFTWARE PROJECTS

or IT 394 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS I
and IT 395 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS II

Interactive and Social Media: Addresses social media and interaction design and integrates technical and creative disciplines such as human-computer interaction, information technology and graphic design.

- IT 130 INTRODUCTORY COMPUTING FOR THE WEB
- ISM 101 FOUNDATIONS OF INTERACTIVE AND SOCIAL MEDIA
- ISM 210 INTRODUCTION TO HUMAN-COMPUTER INTERACTION
- ISM 220 INTERACTIVE DESIGN & PROTOTYPING
- ISM 270 USER-CENTERED WEB DESIGN
  or ISM 320 ADVANCED PRINCIPLES OF INTERACTIVITY
- One ISM elective approved by Professional Advisor
- Three Computing Electives: Computing course or experience approved by PA.
- FA 303 INDEPENDENT ADVANCED PROJECT
  or IS 376 INFORMATION SYSTEMS PROJECT
  or IT 394 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS I
  and IT 395 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS II

Network Technology: Focuses on the theory and practice of designing, deploying and managing both wired and wireless networks technologies, including broadband Internet access technologies, interconnection technologies, network convergence, and network security.

- TDC 311 COMPUTERS IN TELECOMMUNICATIONS SYSTEMS
- TDC 362 PRINCIPLES OF DATA COMMUNICATIONS
- TDC 363 INTRODUCTION TO LOCAL AREA NETWORKS
- TDC 365 NETWORK INTERCONNECTION TECHNOLOGIES
- TDC 372 DIGITAL ACCESS SERVICES
- Four Computing Electives: Computing course or experience approved by PA.
- FA 303 INDEPENDENT ADVANCED PROJECT
  or TDC 376 NETWORK PROJECT
  or IT 394 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS I
  and IT 395 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS II

Security: This focus of study emphasizes the fundamentals of information security, security infrastructure design and implementation, network security technologies, best practices in security design, and security management.

- CSC 233 CODES AND CIPHERS
- CSC 243 PYTHON FOR PROGRAMMERS
- CNS 228 LEGAL, ETHICAL AND SOCIAL ISSUES IN INFORMATION SECURITY
- CNS 340 FUNDAMENTALS OF INFORMATION ASSURANCE
- TDC 365 NETWORK INTERCONNECTION TECHNOLOGIES
- TDC 377 FUNDAMENTALS OF NETWORK SECURITY
- Three Computing Electives: Computing course or experience approved by PA.
- FA 303 INDEPENDENT ADVANCED PROJECT
  or CNS 394 INFORMATION SYSTEMS SECURITY ENGINEERING I
  and CNS 395 INFORMATION SYSTEMS SECURITY ENGINEERING II
  or IT 394 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS I
  and IT 395 SOFTWARE PROJECTS FOR COMMUNITY CLIENTS II

BAC Scientific World Requirements

There are two competencies required in the Scientific World Category for BAC students. They are S-2-H: Data Analysis I, IT 223 and S-2-I: Applied Networks & Security IT 263. These competencies can be fulfilled through the CDM courses listed,

through transfer equivalents or through experiential learning.   An optional FDIS is available for students who complete the L-6 competency but are not ready to address the S-2-H (IT 223) competency.

The FDIS is called Practical Algebra and is offered for the S2X and FX competencies and can be placed in the Open Electives. As with all FDIS courses, students can only select one competency for the class and should decide with their academic committees which of them would be appropriate. For more information, contact John Hemmerling at jhemmerl@depaul.edu.

BAC Open Electives

This area of the curriculum provides BAC students the opportunity to individualize their learning in several ways as they develop their learning plans. The Open Electives can be fulfilled through SNL Liberal Learning or Focus Area competencies, through transfer courses including those from other DePaul colleges such as CDM, or through experiential learning and independent studies.

Computing Topics: The competencies in the Open Elective Area can be used to address computing and technology topics in greater depth beyond the Focus Area requirements or may be used to complete pre-requisite learning needed to begin a Specialized Focus Area Track for those students who enter the program with little computing experience.

Liberal Arts and Business Applications: Students may use this area to address career or personal learning goals that compliment their computing related Focus Areas such as topics related to business or other areas that overlap with computing careers. Students can also use this area to address further learning in the Liberal Learning categories. Therefore, competencies can be placed in the Open Electives from the Arts of Living, Human Community, or Scientific World.

Transfer Course Approval: If students wish to use transfer courses from outside of DePaul for Open Electives, they must get approval from their Faculty Mentors for non-computing topics and approval from their PAs for computing related courses. Likewise, if BAC students wish to use SNL competencies for the Open Electives they need the approval of their Mentors and approval from their PAs if they plan to use CDM courses or computing projects for the Open Electives.

Posting Open Electives: To insure that transfer courses or experiential learning are posted to the Open Electives, BAC students can request to have them posted as EX competencies using the regular transfer course and experiential learning assessment forms. By adding the EX competency designation to a transfer course or ILP, this guarantees that it will place in the Open Elective slots. However, any course that is eligible for placement in the program that does not already have a slot should find its way to the Open Electives and if they are full to the Unused Courses.

As a result of this programming to allow unplaced courses to fill the Open Electives, occasionally courses that are not eligible for placement in the program may find their way to the Open Electives such as composition courses, ineligible math sections, exam registrations and other miscellaneous registrations. If any inappropriate courses find their way to the Open Elective slots, they can be directed to the Unused Courses section. The priority of how courses place into the Open Electives is as follows.

1) Transfer courses with the designation of EX
2) CDM courses that did not place in the Focus Area
3) SNL competencies linked to SNL courses or transfer courses that are in excess of other requirements
4) Other DePaul courses

FX Competencies from SNL Courses: If a BAC student has completed a SNL course for a FX competency, this competency will place into the Open Electives by default rather than the Focus Area. This is because most FX competencies in the SNL courses are not computing related. If the student did address computing related issues in an SNL course taken for the FX competency, the PA can approve to have it directed to the Focus Area.

BAC Advanced Electives

The Advanced Electives in the BAC program are fulfilled in the same way as in the BA program. Therefore, students need to refer to the Foundations handbook to understand the process and rationale for completing them through transfer courses

or experiential learning. In terms of using computing courses for Advanced Electives, since computing topics can apply to the Scientific World, they can be assessed for placement as Advanced Electives.

To have a transfer course considered for placement as a BAC Advanced Elective, students need to submit the course to their mentor on a Non-Pre-Approved Coursework Assessment Form to be forwarded to the Assessment Committee for a determination.

Students should seek assistance of mentors and PAs in completing the assessment form and read the criteria for the E1 and E2 competencies carefully when developing a rationale for the placement of computing topics. If a course is approved for one of these competencies, the student would need to either take a SNL Advanced Elective course for the other competency or find a second course or experience that could be approved for the second competency.

BAC Advanced Project

Advanced Projects for BAC students can be done as independent projects through the FA 303 course. As with all Advanced Projects, the content of the project needs to be related to the theme of the Focus Area and should represent an integration of as many of the Focus Area competencies as possible. In the BAC, this means that the project will be related to some aspect of computing, in either the self designed Customized Focus Area or one of the Specialized Focus Area tracks.

The BAC Advanced Project Advisor (APA) assists BAC students in the development of the Advanced Project for the F11 and F12 competencies in the student's BAC degree. The student is responsible for finding and contacting the potential APA but may request the assistance of the PA in seeking the APA. In addition, the PA may serve as the APA if that person has expertise in the subject matter of the student's project and agrees to serve as the APA.

Students can search the CDM Faculty Profiles website to see the faculty member's background, courses taught and contact information. If a student wishes to recruit a non-CDM faculty member as the APA, the student's PA needs to review that person's credentials and approve the APA assignment. Please see the APA application on the SNL Forms page for more information.

CDM Faculty Search: http://www.cdm.depaul.edu/about/Pages/People/Faculty.aspx

For further information about the Advanced Project, see the Foundations manual.

F11/F12 Computing Capstone Course Option

Students in the BAC program may select a CDM capstone course option to complete their F11 and F12 competencies. The chart below indicates which capstone courses are available for each of the BAC focus area tracks.

If choosing the capstone course option, be sure to check the pre-requisites for the capstone course and build the pre-requisite courses into your program plan with your academic committee. In some cases, these pre-requisites are in addition to the required topics for the Focus Area, although these courses can be placed as electives. For information about the CDM capstone courses, see the course descriptions in Section Four of this guide.

BAC Track Option	Capstone Course Options	Pre-requisites
	Students in any BAC track can select the SNL Advanced Project FA 303.	For tracks offering the IT 394/IT 395 option, no pre-requisites are required.
Customized	Any options listed below as appropriate for student's focus area approved by PA.	
Computer Science	CSC 394 or IT 394 and IT 395	For CSC 394: CSC 301 or CSC 383 or CSC 393 or IM 360 For IT 394: IT 320 or CSC 355 or CSC 360
Information Systems	IS 376 or IT 394 and IT 395	For IS 376: IS 372 For IT 394: IT 320 or CSC 355 or CSC 360
Information Technology	CSC 394 or IT 394 and IT 395	For CSC 394: CSC 301 or CSC 383 or CSC 393 or IM 360 For IT 394: IT 320 or CSC 355 or CSC 360
Interactive / Social Media	IS 376 or IT 394 and IT 395	For IS 376: IS 372 For IT 394: IT 320 or CSC 355 or CSC 360
Network Technology	TDC 376 or IT 394 and IT 395	For TDC 376: TDC 365 For IT 394: IT 320 or CSC 355 or CSC 360
Security	CNS 394 and CNS 395 or IT 394 and IT 395	For CNS 394: CNS 378 and TDC 377 and TDC 379. For IT 394: IT 320 or CSC 355 or CSC 360

BAC Computing Exams, ILPs, Transfers, Substitutions

While the BAC program is competency based, the standard used by CDM Professional Advisors to measure the appropriate level of technical skills that students have achieved in relation to the computing competencies is a comparison to the skill levels required in CDM courses. Therefore, while BAC students may fulfill their computing competencies through non-DePaul transfer courses or experiential learning projects, they must demonstrate the same high standards set by CDM for students demonstrating competency through completing the CDM course equivalent.

For students completing a Customized Focus Area Track, the CDM PA will work with each individual student on determining the most appropriate learning activities to fit the student's learning goals, level of experience, and technical capabilities. For students wishing to complete a Specialized Focus Area Track, the PA will help to determine if the student is ready to begin the Specialized Track directly or if the student needs to develop some pre-requisite skills to begin the Specialized Track. If this is the case, these learning activities can fulfill Focus Area competencies or Open Elective competencies as long as they are college level as determined by the PA.

Substitutions may be approved by the PA for certain computing competency topics if the student's individual learning plan, goals, or previous courses require it. In some cases, students may be able to substitute certificates for courses with the approval of the PA. In terms of the Specialized Focus Area Tracks, if the requirements change before a student completes the track, the PA will approve substitutions to accommodate the new requirements. Therefore, the student will not lose any courses previously taken, but may substitute new course titles for those no longer available.

CDM Test Exams:

CDM offers Graduate Assessment Exams for graduate prerequisite courses required in CDM graduate programs. BAC students may take these exams and use them to fulfill competency requirements in their programs with the approval of the student's PA. Exams are graded on a pass/fail basis and only one attempt is allowed.

SNL students are not able to use the CDM online registration form, but can be registered by the CDM Student Advising office. Once the PA approves the request for taking the assessment exam, the PA will forward the student's request to the CDM Student Advising office and the student will be contacted with a confirmation of the exam registration.

Information about the exam process and which courses have corresponding exams can be found at the following url:

http://www.cdm.depaul.edu/academics/Pages/GraduateAssesmentExams.aspx

The following topics are available.

> CNS 418: Introduction to Host Security
> CSC 400: Discrete Structures for Computer Science
> CSC 401: Introduction to Programming
> CSC 402: Data Structures I
> CSC 403: Data Structures II
> CSC 404: Accelerated C++
> CSC 406: Systems I
> CSC 407: Systems II
> CSC 412: Tools and Techniques for Computational Analysis
> ECT 410: Development of Web-Based Business Applications
> HCI 402: Foundations of Digital Design
> HCI 406: Website Design for HCI
> IT 403: Statistics and Data Analysis
> IT 411: Scripting for Interactive Systems
> TDC 405: Voice and Data Network Fundamentals
> TDC 411: Computers in Information Systems and Telecommunications
> TDC 413: Introduction to LAN and WAN

Computing Related ILPs: Students in the BAC program can use ILPs for any particular computing requirement in the program. However, keep in mind that at least 5 courses need to be taken as CDM courses to qualify for the BAC degree. The ILP process should begin with a conversation with the PA about the type of experience previously obtained or proposed in a new learning project. The Faculty Mentor is available to assist in the development of drafts, but the PA will provide assistance on presenting content and assessing the project.

BAC Computing Transfer Course Placement: Transfer courses for computing topics need to be posted on the student's record as the DePaul course equivalents on Campus Connect to place correctly on the student's degree progress report. If

computing courses are posted as SNL competencies, they may not place properly on the student's report. If a course needs to be reposted on the student's record, contact snlrecords@depaul.edu to request to have the requirement designation changed. There are no CDM policy restrictions regarding use of old computing courses in a student's competency requirements. These courses can generally be placed into elective slots but would not be used fulfill a requirement if the content of the course does not match the requirement.

DePaul Transfer Course Website: Students can check if an articulation exists for their specific courses from their prior schools at the DePaul Transfer Course website. If a specific DePaul course is listed as the equivalent on the transfer site, it should appear that way on the student's records. The transfer may also appear as a general category, such as CSC TR200. If this is the case, the course is considered as eligible for transfer as a general computing requirement, but not for a particular course requirement. If the course is not listed on the transfer site, the student can request the PA to determine the correct placement.

CDM Course Competency Requirement

BAC students are required to complete at least 5 competencies in their programs as CDM courses. This does not include experiential learning, ILPs, or SNL competencies such as Advanced Project. The five required CDM courses may be placed in the Focus Area, Scientific World or Open Electives with approval of the PA and in the Advanced Electives with the approval of the SNL assessment committee. Competencies completed through CDM certificate programs count as part of the 5 competency requirement.

Pass / Fail option for SNL and non-SNL courses

SNL students must get have a grade C- or better in all courses and competencies to count the grade toward program requirements. When taking Pass/Fail in SNL courses, C- is the standard required to get a Pass grade for the course. Therefore, BAC students are welcome to complete competencies as Pass/Fail grades for SNL courses and projects.

However, when taking Pass/Fail courses in other parts of the university, D- is the standard to get a Pass grade. Therefore, BAC students are not be allowed to take courses outside of SNL using the Pass/Fail option and in particular, courses from CDM. In terms of the CDM Graduate Assessment exams, the standard of C- or better applies to achieve a Pass, so they are acceptable as competency.

Section Three: BAC Program Options

CDM Certificate Programs

CDM offers Certificate Programs through their Institute for Professional Development in a variety of topic areas that can be used in the BAC program as Focus Area requirements or Open Electives. These programs vary in the amount of credit hours that are given and students must consult with their PAs on an individual basis to determine how these certificates may fit into one's individual learning plan. These courses must be taken for letter grades and the student must earn a C- or better to count them as BAC requirements.

Students can incorporate one or more of the CDM Certificate Programs into their Customized Focus Tracks or may substitute them for certain requirements in a Specialized Focus Area Track with the approval of their PAs. While students take the CDM certificates for grades, they are considered outside of standard DePaul course offerings and these grades do not count toward the student's GPA.

When the certificate is completed and the grade is listed on the system, the student can contact the SNL Associate Director of Joint Degree Programs to place it in the correct slot on the student's program grid.

Certificate Schedules: The certificate programs may or may not fall into the regular DePaul quarterly schedule and therefore may require a fair amount of advanced planning and/or juggling with regular course schedules. These programs are eligible for financial aid assistance if they are applied to a degree program such as the BAC. For this reason, it is also important to plan ahead as these courses may need to be taken in certain times of the year in order to qualify for aid in a particular financial aid cycle.

Locations: Certificate programs are offered at several DePaul campuses and some are accessible online. For information about these topics, schedules and syllabi for these certificates, go to the [Institute for Professional Development](#) at CDM. Below is a list of topics periodically available.

Big Data and Data Science Technologies:

[Big Data and NoSQL Program](#) an 11-week program covering popular NoSQL databases and how they fit with Big Data

[Big Data Using Hadoop Program](#) an 11-week program covering the Apache Hadoop framework and how it fits with Big Data

Cloud Computing Technologies:

[Cloud Computing Technologies Program](#) an 11-week program covering the principles, methods, and technologies of Cloud Computing

Database Technologies:

[Advanced SQL Program](#) a 2-week program covering advanced Structured Query Language (SQL)

[SQL Server Business Intelligence Program](#) an 11-week program covering analysis services, integration services, and reporting services using Microsoft SQL Server 2012

[SQL Server Database Administration Program](#) an 11-week program covering database administration using Microsoft SQL Server 2012

Network Technologies:

[IPv6 Program](#) a 10-week online program providing comprehensive coverage of IPv6 technologies and strategies for transitioning enterprise networks to IPv6

Project Management:

[IT Project Management Program](#) a 10-week online program providing comprehensive coverage of IPv6 technologies and strategies for transitioning enterprise networks to IPv6

Software Development:

[Java Developer Program](#) a 10-week program covering object-oriented applications development using Java

[Java Web Services Program](#) - a 7-week program covering service-oriented architecture and the development of Web services using Java

[Java Web Development Program](#) - an 8-week program covering open-source, lightweight Java enterprise Web development using Plain Old Java Objects (POJO)

[.NET Web Developer Program](#) a 10-week program covering web development with Microsoft .NET technologies

[Ruby on Rails Program](#) an 8-week program covering Web development using Ruby on Rails

[Web Development with JavaScript and HTML5 Program](#) an 8-week program focused on user-centered Web development

[Web Development with Python Program](#) a 5-week program covering Web development with the Python programming language

Former CDM Certificate Programs: The following certificate programs are no longer offered by CDM but they are listed below to inform students who may have taken them in the past how to place them in the BAC program requirements.

Best Practices in Web Design Program (formerly called Standards-based Web Design Program); Course #: IPD 381; Credit hours: 4 Undergraduate; BAC Competencies: 1; CDM Course Equivalent: Undergraduate: HCI 201 or HCI 210

Cloud Computing Infrastructure and Operations Program, Course #: IPD 354 (Undergraduate); Credit hours: 2.5 Undergraduate, BAC competencies: 1; CDM Course Equivalent: none

Computer Career Program; Course #: IPD 397; 20 Credit hours: BAC Competencies: 5; CDM Course Equivalent: Undergraduate: CSC 200 (or ECT 250), CSC 203, CSC 240, IS 315, and one 300-level elective; Graduate: Pre-Requisite Credit Only: CSC 203, CSC 240, and IS 315

Database Technologies Program; Course #: IPD 395; Credit hours: 10 Undergraduate; BAC Competencies: 3; CDM Course Equivalent: Undergraduate: CSC 319; Graduate: CSC 449

Information Systems Security Management Program; Course #: IPD 390; Credit hours: 10 Undergraduate; BAC Competencies: 3; CDM Course Equivalent: Undergraduate: none; Graduate: IS 433

Java EE Developer; Course #: IPD 394; Credit hours: 10 Undergraduate; BAC Competencies: 3; CDM Course Equivalent: none; (formerly J2EE Developer Program).

Local Area Networks Program; Course #: IPD 393; Credit hours: 10 Undergraduate; BAC Competencies: 3; CDM Course Equivalent: Undergraduate: TDC 363 and one 300-level TDC course; Graduate: TDC 564

.NET Mobile Application Development Program; Course #: IPD 368 (Undergraduate) or IPD 468 (Graduate); Credit hours: 4 Undergraduate or 4 Graduate; BAC Competencies: 1; CDM Course Equivalent: none

.NET Web Services Program; Course #: IPD 398; Credit hours: 6 Undergraduate; BAC Competencies: 2; CDM Course Equivalent: none

Network Security Program; Course #: IPD 396; Credit hours: 10 Undergraduate; BAC Competencies: 3; CDM Course Equivalent: Undergraduate: TDC 377; Graduate: TDC 477

SQL Server Database High Availability Program; Course #: IPD 361 (Undergraduate) or IPD 461 (Graduate); Credit hours: 4 Undergraduate or 4 Graduate; BAC Competencies: 1; CDM Course Equivalent: none

Telecommunications; Course #: IPD 392; Credit hours: 10 Undergraduate; BAC Competencies: 3; CDM Course Equivalent: Undergraduate: TDC 361; Graduate: TDC 464

Visual C++ Program, IPD 383; Course #: Credit hours: 10 Undergraduate; BAC Competencies: 3; CDM Course Equivalent: Undergraduate: CSC 309

BAC Combined Degree Program

This program option is available to students in the BAC degree program. The Combined Degree Program allows students in the BAC to take up to 3 Graduate level CDM courses and apply them to both the BAC program requirements and a Master's level program at CDM including the MSAT joint degree program with SNL (see MSAT program description below). These courses carry the CDM Undergraduate tuition rate and require admission to the Combined Degree Program and a special registration process with the approval of the student's Professional Advisor (a CDM faculty advisor).

Before applying to this program, please read the program description found at this URL.

http://www.cdm.depaul.edu/academics/Pages/CombinedDegrees.aspx

Admissions Process:

To apply to the program, students must maintain the following criteria as described on the CDM web site.

- Minimum of 6 courses or 24 credit hours completed at DePaul
- GPA of 3.3 or higher at DePaul
- Endorsement of faculty advisor (the PA in the BAC program)
- Must get grade of C- or higher in Graduate level courses

SNL students in the BAC program can send an email to Kenn Skorupa, BAC Champion, to apply and should include their name, DePaul ID number and copy their Faculty Mentor and PA. The CDM website instructs CDM students to email the CDM Advising Center to apply, but BAC students are to submit their request to Kenn Skorupa at kskorupa@depaul.edu.

Students will be contacted by email when they have been approved for the Combined Degree Program. This will involve changing the student's program codes to enable eligibility for Graduate registrations.

Registration for Combined Degree Courses:

The registration process is the same for BAC and CDM students. The student's advisor must email Associate Dean Lucia Dettori requesting the enrollment. The following information should be included in the email: student's full name, DePaul ID, graduate course and section, and the undergraduate course to be substituted for. Student services will process the enrollment.

Master of Science in Applied Technology (MSAT):

The Master of Science in applied technology (MSAT) program is a joint degree offered through the School for New Learning and the College of Computing and Digital Media. The program is designed for people who want to deepen their understanding and use of technology while enhancing their skills and knowledge for improving the interface between technology and people in organizational systems.

The MSAT program allows students to develop a highly focused set of applied technology skills and enhance their understanding of the organizational, interpersonal and learning issues that characterize today's changing work environment. Students also learn how to help organizations connect their technical and social systems with one another.

The program consists of 58 quarter hours which are distributed across program planning and integration, liberal learning seminars, professional core coursework and independent, work-based projects in each area of specialization. Students begin by choosing one of five areas of specialization for their graduate study:

Applied Information Systems prepares students to lead and support an organization's changing needs in the use of information and information technologies.

Applied Network Technology trains professionals to mediate industry demands for innovative network designs, new network applications and services, and the interactions between business enterprises and the network providers that serve them.

Applied IT Project Management advances the capabilities of working professionals to fill the growing need for IT project managers.

Applied Information Technology addresses contemporary needs for understanding and applying the core principles of technology to solve problems, as well as improving effectiveness and increasing efficiencies in corporations, health care institutions and government agencies.

Applied Human-Computer Interaction prepares students to design, implement and evaluate computer interfaces so they are accessible and easy for people to use.

MSAT Contact Information:

Phone: 312-362-8448
Email: snlgrad@depaul.edu
Website: http://snl.depaul.edu/academics/graduate/programs/applied-technology-ms/Pages/default.aspx

CDM Course Online (COL) Format

For additional information about the COL format, go the COL Information website.

The COL system at CDM is available for both on campus and online learning sections of CDM courses. However, some instructors that teach on campus may choose not to use the system. It involves several components including streaming video of lectures, white board notes and PowerPoint presentations to guide students through the lectures and access course syllabi and documents.

The quality of the COL system continues to develop and improve with time. However, it is not the same as being in a classroom to observe the lectures. Students can view samples of the COL system if to determine if the format will meet their needs. For instance, students can see and hear the instructor better than other students who may comment in the class with the COL format.

Students will also receive information during the class sessions through white board notes. The white board basically replaces the chalk board from the classroom and will capture any notes the instructor writes during the class session. In addition, students see any documents that would be posted on an overhead projector in the classroom. There are also PowerPoint presentations that guide students through the lectures and can direct them to specific topics addressed in the lecture.

Students can rewind and forward the video as many times as necessary and the lectures are available only until two weeks after the end of the quarter. COL recordings are not available after the end of the quarter. Each quarter, on the last day of final exams, all COL recordings will be removed from COLWeb. Note that other course materials posted on the COLWeb will still be available until two weeks after the quarter ends.

COL Access: Students may only have access to the COL recordings of the section in which they are currently enrolled. Students may not have access to another section of the same course, even if the same instructor teaches the other section. In addition, students do not have access to a course they took in a previous quarter, even if completing an Incomplete, or studying for a core exam. For information on enrolling in closed sections of OL courses, please refer to the CDM closed class policy listed above.

Students can view the lectures while online or download and save them for later viewing while the quarter is in session. All downloaded lectures expire automatically after two weeks after the quarter ends.

Access to Classroom Lectures: Due to space limitations, students enrolled in an OL Learning section are generally not allowed to attend class on campus except for certain examinations or presentations with the approval of the instructor. Students who are able to attend class on campus should register for the live section of the class although OL students can contact the instructor to assess the availability of space in the class. Presentations can be made to the instructor by appointment or by video tapes or other formats.

COL Instructor Access: CDM stresses the importance of self-discipline and time-management skills required to complete courses using the online format. CDM OL courses are not independent studies. Students are required to follow all class deadlines and activities throughout the quarter. Communication with CDM OL staff takes place primarily via email. The student is responsible for keeping email addresses and home address current on the Campus Connect system, indicating the preferred address and for monitoring their email accounts for important messages. Instructors will indicate to their students the best way to contact them, but in general, OL students can call, email, fax or show up in person for office hours.

Taking Exams: Remote students are responsible for finding an acceptable exam proctor. Though the CDM OL staff is happy to assist in this effort, the responsibility for finding a proctor ultimately lies with the student. Students considering online

learning should look for possible proctors before registering for a course. Acceptable proctors include: college or university testing centers, commercial testing centers (e.g. Sylvan Learning Center), or a municipal or university librarian. However, students in the Chicago area are expected to schedule and attend their exams at a DePaul campus. Students using a proctor are responsible for any fees charged by that proctor. There is no proctoring fee for online learning exams taken at any DePaul University campus.

Online Learning Services: The CDM OL staff send emails to registered students at the start of the quarter and basic instructions to get started. Students use their campus connection credentials to log in and access the COL system. Specific hardware and software requirements can be checked on your PC using a system test available at the CDM OL site under Course OnLine Overview. Tutoring services are available from CDM on campus or by phone, email or through Wimba. Wimba is a web-based learning environment that provides audio and video conferencing, document sharing, and virtual whiteboard sharing and desktop sharing. Books are available through an online vender.

Availability of OL Courses: Course OnLine allows DePaul CDM to offer over 100 individual undergraduate courses online each quarter. Some topics in the CDM catalog and the Specialized Focus Area Tracks are not available as OL sections. In general, digital media courses (that would include courses with ISM, GAM, ANI, DC, and GD labels) are not delivered on line; but GAM and ANI are more available than the others. Therefore, the following Specialized Focus Area Tracks would not be available as online learning options at this time: Human Computer Interaction, Computer Graphics and Animation, and Digital Cinema without transfering or using experiential learning for some course requirements. If a course is not scheduled to be offered as an online section, students can request to have it offered in this format. However, these requests must be made at least 4 weeks prior to start of the quarter to allow CDM to arrange for this option. These requests can be made to Brooke Shannon in the CDM Advising Center at bshannon@cdm.depaul.edu, 312.362.5228.

Availability of OL CDM Certificate Programs: CDM offers a variety of short-term, accelerated certificate programs through its Institute for Professional Development. The programs are offered quarterly and are geared for IT professionals who wish to learn new technologies and update their skills in a short amount of time. Most certificate programs are available exclusively online via an online section or students may enroll in the traditional section meeting on campus. For more information about the certificate programs, please visit ipd.cdm.depaul.edu or call 312-362-6282.

You need to consult with your PA to plan your programs options with the OL curriculum and forward your requests for online learning sections to:

Email: OLStaff@CDM.depaul.edu
Phone: 312/362-5243
Web: OL Program Information

Minors

BAC students can complete the requirements for a minor from any DePaul college that offers them. The process for requesting and completing a minor is that the request must be made in writing with the approval of the Faculty Mentor to the SNL Admissions Coordinator. The minor will then appear on the student's record and must be officially withdrawn if not completed or it will prevent graduation. Students in the BAC can use Open Electives to place minor courses or other areas of the curriculum that accept the content of the course.

In order to earn a minor, a student must:

- Earn at least a grade of "C-" in each course and a GPA of no less than 2.0 for all courses in the minor.
- Earn at least a cumulative GPA of 2.0 for all courses applied to the minor.
- Earn a letter grade. The pass / fail option may not be selected for courses in the minor.

Meet the following residency requirement: no more than 50% of the requirement of a minor may be fulfilled by transfer credits, AP credit, IB credit or CLEP credit.

Courses required to fulfill a minor are determined by the unit in which the minor resides.

Section Four: Appendices

Appendix A: BAC Competency statements, listed by department

The following list is organized by course department title and includes the course information, the competency statement that accompanies the course and the BAC Specialized tracks that require the course. The competency statement and supporting course description can be used to identify transfer course equivalents and to guide the development of independent learning pursuits (ILPs) for BAC computing related competencies. Most of the course numbers have a hyperlink to further information about that course.

Computer, Information and Network Security Course Competencies:

CNS 228: Legal, Ethical and Social Issues in Information Security

Course required in the following tracks: Security

Competency Statement: Can evaluate potential electronic security and ethics issues including personal and organizational liability issues, privacy laws, and risk management and operation feasibility.

Course Description: This course is designed to acquaint students with electronic privacy, security and ethics. Students will gain an understanding of information ethics, existing and emerging cyber-laws, organizational liability issues, and explore several Code of Ethics. Students will learn about real and potential security issues, steps that can be taken to create environments of trust, how to evaluate the strengths and weaknesses of a firm's information resource environment, and risk management and operation feasibility issues. PREREQUISITE(S): None.

CNS 320: Computer Forensic and Incident Response

Course required in the following tracks: Security

Competency Statement: Can demonstrate an understanding of Cybercrime investigation and prosecution.

Course Description: Introduction to the topics of computer forensic, computer crimes, response to security incidents, Cybercrime investigation and prosecution. Students will learn how an organization can setup a security response team, prepare for Security incidents and manage these incidents. PREREQUISITE(S): (CSC212 or CSC224) and (CSC373 or CSC383)

CNS 340: Fundamentals of Information Assurance

Course required in the following tracks: Security

Competency Statement: Can demonstrate an understanding of the fundamental elements of computer security and information assurance.

Course Description: This course is a survey of the fundamental elements of computer security and information assurance. Topics may include confidentiality, integrity, and availability; security policies; authentication; access control; risk management; threat and vulnerability assessment; common attack/defense methods; ethical issues. PREREQUISITE(S): CSC 212 or CSC 262

CNS 378 Host and Information Security (formerly IT 378)

Course required in the following tracks: Security

Competency Statement: Can work with security tools to ensure the confidentiality, integrity, and availability of the information stored on a host or server.

Course Description: Principles of host, server and information security issues. Review of security methods used to ensure the confidentiality, integrity, and availability of the information stored on a host or servers. Linux and Windows Network Operating Systems will be used as examples. The class will cover host/web server hardening, information asset

classification, threat assessment and analysis, evidence retention and forensics. Course includes laboratory work with security tools, server hardening techniques and integrity checking methods. PREREQUISITE(S): Familiarity with Desktop Operating Systems

CNS 394 Information Systems Security Engineering I

Capstone Course option in the following tracks: Security, Customized

Competency Statement: Written by academic committee.

This course requires students to apply Information System Security Engineering methods and processes to design, document and implement comprehensive security infrastructures in realistic scenarios. Students will work in teams through the entire life cycle of a Security infrastructure project from needs discovery, threat assessment, architecture design, implementation, effectiveness assessment and auditing. The course is designed to span two quarters. In this first quarter, student will learn the Information Systems Security Engineering process and performs asset identification, threat assessment and system requirement specification. PREREQUISITE(S): CNS 378 (formerly IT 378) and TDC 377 and TDC 379.

CNS 395 Information Systems Security Engineering II

Capstone Course option in the following tracks: Security, Customized

Competency Statement: Written by academic committee.

This senior project capstone course requires students to apply Information System Security Engineering methods and processes to perform the design and implementation of Information Systems Security infrastructures. The human and sociological impacts of Information Security will be studied with a particular focus on privacy issues, ethical use of Security tools and cultural and legal difference that exist in a globally connected but diverse world. PREREQUISITE(S): CNS 394

Computer Science Course Competencies:

CSC 211: Programming in Java I

Course required in the following tracks: Computer Science, E-Commerce Technology, Network Technology, Security

Competency Statement: Can use Java programming to solve problems with algorithms and implementing algorithms.

Course Description: Introduction to programming in Java and problem solving. Variables, data types, input/output, using objects and methods from the standard classes (such as String and Scanner), control structures, writing methods, arrays. Solving problems with algorithms and implementing algorithms in Java. PREREQUISITE(S): NONE.

CSC 212: Programming in Java II

Course required in the following tracks: Computer Science, E-Commerce Technology, Network Technology, Security

Competency Statement: Can write programs in Java and solve problems using sorting arrays of primitive data, arrays of objects, and exception handling.

Course Description: Intermediate programming in Java and problem solving. Writing Java programs with multiple classes: constructors, visibility modifiers, static members, accessor and mutator methods, and arrays of objects. Inheritance, polymorphism, and interfaces. Sorting arrays of primitive data and arrays of objects. Exception handling. PREREQUISITE(S): CSC 211.

CSC 224: Java for Programmers

Course required in the following tracks: Computer Science

Competency Statement: Can demonstrate the use of object-oriented programming using Java and design, code and test multi-class Java programs.

Course Description: Object-oriented programming using Java for students that already know how to program. Students will learn how to design, code and test multi-class Java programs. Topics covered include: Variables, Operators, Arrays, Classes, Inheritance, Abstract classes, Interfaces, Inner classes, Exception Handling, File I/O, User Interfaces, and Event Handling. PREREQUISITE(S): Experience in at least one high-level programming language.

CSC 233: Codes and Ciphers

Course required in the following tracks: Security

Competency Statement: Can demonstrate an understanding of the science and history of cryptography and cryptanalysis to secure communications channels.

Course Description: This course is an introduction to the science and history of secret writing (cryptography) and how codes and ciphers can be broken (cryptanalysis). In historical settings we will encounter the main ideas and methods devised to secure communication channels. Possible topics include: substitution ciphers, transposition ciphers, the Vigenere cipher, statistical methods in cryptanalysis, public-key cryptography, and quantum cryptography. PREREQUISTE: ISP 120.

CSC 241: Introduction to Computer Science I

Course required in the following tracks: Computer Science

Competency Statement: Can use a higher-level programming language to solve problems, develop algorithms and write and debug programs.

Course Description: An introduction to problem solving, algorithms and structured programming using a higher-level programming language. The course will focus on skills for developing algorithms, and for writing and debugging programs. Students will learn how and when to use loops, conditionals, and functional abstractions in the context of problems motivated by real world applications. PREREQUISITE: MAT 130 or Mathematics Diagnostic Test placement into MAT 140.

CSC 242: Introduction to Computer Science II

Course required in the following tracks: Computer Science

Competency Statement: Can use a higher level programming language to do advanced problem solving, algorithm development and programming and apply these skills to several application areas of computer science including object oriented programming.

Course Description: An intermediate course in problem solving, algorithms and programming. Programming skills are further strengthened through more complex and larger programming assignments. The assignments will also be used to introduce different Computer Science areas (e.g. a Client/Server application for the Distributed Systems area). Classes and object oriented programming are motivated and introduced. PREREQUISITE: CSC241

CSC 261: Programming Languages I: C/C++

Course required in the following tracks: Computer Graphics / Software Development, Computer Science, Network Technology, Security

Competency Statement: Can use basic algorithms for manipulating data and use a library of graphics functions to display data and manipulate graphical objects interactively.

Course Description: This is an introductory course in computer programming covering basic data types, functions and parameter passing, loops and decisions, arrays and pointers, using pointers to pass parameters by reference, strings and the C string library, I/O using the C standard I/O library, user defined data types. Examples in this course will concentrate on

basic algorithms for manipulating data and using a simple library of graphics functions to display data and manipulate simple graphical objects interactively. PREREQUISITE(S): MAT 130 or equivalent

CSC 262: Programming Languages II: C/C++

Course required in the following tracks: Computer Graphics / Software Development, Computer Science, Network Technology, Security

Competency Statement: Can use principles of object oriented design including encapsulation, inheritance and polymorphism to demonstrate memory management, system calls and user defined data types.

Course Description: This course expands on CSC 261 covering issues of memory management, system calls and user defined data types. Topics include making system calls, objects as a way to combine data and methods, encapsulation and dynamic memory allocation. Principles of object oriented design including encapsulation, inheritance and polymorphism. PREREQUISITE(S): CSC 261

CSC 309: Object-Oriented Programming in C++

Course required in the following tracks: Computer Science

Competency Statement: Can use C and C++ programming to demonstrate the use of memory management and data structures.

Course Description: The essentials of C and C++ programming, focusing primarily on the topics of memory management and data structures such as linked lists and trees. Recursion, inheritance, virtual functions, overloaded operators, templates. PREREQUISITE(S): CSC 212 or CSC 224.

CSC 333: Cryptology

Course required in the following tracks: Security

Competency Statement: Can use methods of cryptography and cryptanalysis.

Course Description: Introduction to the methods of cryptography and cryptanalysis. Topics include classical cryptography (codes, substitution ciphers, transposition ciphers), block and stream ciphers (Feistel networks, DES), and public key cryptography (RSA, Key agreement, signature schemes). Optional topics include zero-knowledge protocols, quantum cryptography, and history. Prerequisites: MAT 140 and CSC 211

CSC 373: Computer Systems I

Course required in the following tracks: Computer Science

Competency Statement: Can demonstrate an understanding of machine-level programming and architecture and their relevance for application programming.

Course Description: A course on computer systems topics, focusing on machine-level programming and architecture and their relevance for application programming. Information representations, assembly language and debuggers, processor architecture, program optimization, memory hierarchy and caching. PREREQUISITE: CSC211 or CSC224 or CSC 309 or CSC261 or CSC241

CSC 374: Computer Systems II

Course required in the following tracks: Computer Science

Competency Statement: Can demonstrate an understanding of operating systems components and their relevance for application programming.

Course Description: A course on computer systems topics, focusing on operating systems components and their relevance for application programming. Linking, processes, virtual memory, dynamic memory allocation, system level I/O, networking and network programming, concurrent servers and web services. PREREQUISITE: CSC373

CSC 383: Data Structures and Algorithms in Java

Course required in the following tracks: Computer Science

Competency Statement: Can design, implement, apply, and analyze algorithms in a variety of data structures.

Course Description: Design, implementation, application, and analysis of algorithms on a variety of data structures, including stacks, queues, lists, trees, binary heaps, hash tables, and graphs. Algorithmic analysis includes computation of running times and asymptotic analysis. PREREQUISITE: CSC212 or CSC224

CSC 393: Data Structures in C++

Course required in the following tracks: Computer Science, Computer Graphics / Software Development

Competency Statement: Can use C++ programming to demonstrate advanced functions in memory management and allocation such as stacks, heaps and memory pools.

Course Description: This course covers topics in data structures, algorithms and object oriented programming in C++. Topics include trees, recursion and traversing trees, balancing, graphs, hash tables. Analysis of algorithms. More advanced topics in memory management and allocation such as stacks, heaps and memory pools. Optional topics, as time allows will include: run-time type checking, performance optimization and templates. PREREQUISITE(S): (MAT 140 or MAT 150) and (CSC 262 or CSC 309)

CSC 394 Software Projects

Capstone Course option in the following tracks: Computer Science, E Commerce, Information Technology, Customized

Competency Statement: Written by academic committee.

Students will be provided with experience in team design, implementation and testing of a large software project. PREREQUISTE(S): CSC 301 or CSC 383 or CSC 393 or IM 360

Interactive Media Course Competencies:

IM 210: Introduction to Human-Computer Interaction

Course required in the following tracks: E-Commerce Technology, Interactive Media, Information Systems

Competency Statement: Understands the user interface development process and can design a low-tech user interface that includes user and task analysis, design, prototyping and evaluation.

Course Description: (Formerly HCI 210) The user interface development process, including user and task analysis, design, prototyping and evaluation. Human memory, perception, and motor abilities as they relate to user interface design. Students design a low-tech prototype of a user interface. Students prepare written documents describing their activities and present the final results to the class. PREREQUISITE(S): SOPHOMORE STANDING

IM 220: Interactive Media I

Course required in the following tracks: Interactive Media

Competency Statement: Can plan and produce an interactive web project that demonstrates creative problem-solving skills, appropriate evaluation of plan objectives, creation of assets and prototypes, and a final product that features aesthetic applications using Flash program or a comparable program or experience.

Course Description: This course will focus on planning and producing interactive web projects. Students develop their creative problem-solving skills through evaluating objectives, creating assets, prototyping, planning and producing aesthetic applications using Flash. PREREQUISITE(S): None

IM 230: Scripting for Interactive Media

Course required in the following tracks: Interactive Media

Competency Statement: Understands how Object-Oriented programming is used to create real-world interactive web applications and animations including the use of variables, loops, conditionals, event handling, and classes using Flash ActionScript or a comparable program or experience.

Course Description: This course is an introduction to Object-Oriented programming using Flash ActionScript. Subjects covered include variables, loops, conditionals, event handling, and classes, and how they are used to create real-world interactive web applications and animations. PREREQUISITE(S): None

IM 270: User-Centered Web Design

Course required in the following tracks: Interactive Media

Competency Statement: Understands principles of interactive design for web pages and sites, design patterns for information navigation and technologies supporting dynamic and interactive content.

Course Description: (Formerly HCI 270) Principles of interactive design for web pages and sites. Design patterns for information navigation. Use of HTML and CSS to produce standards- and accessibility-compliant web pages. Overview of technologies supporting dynamic and interactive content. Prerequisites: None.

IM 320: Interactive Media II

Course required in the following tracks: Interactive Media

Competency Statement: Can design complex interactive web projects to solve real-world problems, demonstrate organizational and analytical strategies including site integration, utilizing remote data and manipulating video.

Course Description: This course will use complex interactive web projects to challenge students to solve real-world problems. Students will build upon the organizational and analytical strategies learned in IM I while expanding their knowledge of Flash subjects such as site integration, utilizing remote data and manipulating video. PREREQUISITE(S): IM 220 Interactive Media I

IM 330: Advanced Scripting for Interactive Media

Course required in the following tracks: Interactive Media

Competency Statement: Can use Flash ActionScript program or a comparable program or experience to design, code and debug complex applications.

Course Description: This course builds on the Flash ActionScript programming skill learned in Scripting for Interactive Media. Students will focus on designing, coding and debugging complex applications. PREREQUISITE(S): IM 230 Scripting for Interactive Media

Information Systems Course Competencies:

IS 372: Fundamentals of Software Project Management

Course required in the following tracks: Information Systems

Competency Statement: Can manage a broad range of systems including Web-based application development.

Course Description: (Cross-listed with ECT 372) An introduction to the concept and techniques of project management for a broad range of systems, including Web-based application development. Topics include resource management, organizational factors, project manager responsibilities, team building, and risk management. Tools and techniques for project estimating and scheduling will be presented. Case study and group projects. PREREQUISITE(S): IT215

IS 373: Introduction to Large Systems Implementation

Course required in the following tracks: Information Systems

Competency Statement: Can implement a complex package for enterprise computing in a client-server environment including system integration, change management and package selection.

Course Description: An introduction to the implementation of complex package solutions for enterprise computing in a client-server environment. Functionalities and purposes of package solutions, such as enterprise resource planning (ERP), customer relationship management (CRM), and supply chain management (SCM). Business process framework, architecture, implementation tools and methodology, system integration, change management, and package selection. PREREQUISITE(S): IT 215.

IS 376 Information Systems Project

Capstone Course option in the following tracks: Information Systems, Interactive / Social Media, Customized

Competency Statement: Written by academic committee.

This senior project course requires students to apply prior learning in project management and systems development life cycle by developing a complete systems from business case, analysis, design, through implementation strategies. Team project, documentation, presentation, the use of development as well as project management tools will be emphasized. PREREQUISITE(S): CSC212, IS371, IS372, IS373.

Information Technology Course Competencies:

IT 130: The Internet and the Web

Course required in the following tracks: E-Commerce Technology, Interactive Media, Information Technology

Competency Statement: Understands basic principles of effective interface design for the web; roles and operation of web browsers and servers; can create web pages with HTML and use JavaScript for dynamic effects.

Course Description: This course introduces basic concepts of the Internet and World-Wide Web. Students will learn how to create web pages with HTML, and use JavaScript for dynamic effects. Major topics include the roles and operation of web browsers and servers, including interacting with web applications through forms; and the separation of formatting and logical structure in HTML documents, stylesheets, and the basic principles of effective interface design for the web. Equivalent to CSC 255. PREREQUISITE(S): none.

IT 201: Introduction to Information Systems

Course required in the following tracks: Information Systems, Network Technology

Competency Statement: Can demonstrate how information is used by organizations to conduct business and solve problems.

Course Description: (Formerly IS 201 Introduction to Information Systems) This course demonstrates how information is used by organizations to conduct business and solve problems. This course presents information systems principles and demonstrates how they form an integral part of modern organizations. Topics include systems concepts; organizational processes; technological aspects of information systems; the Internet; IT security and ethical issues; database management; and systems development life cycle. In addition, students familiarize themselves with the DePaul computing environment and demonstrate competency at navigating that environment. PREREQUISITE(S): none

IT 215: Analysis and Design Techniques

Course required in the following tracks: Information Systems, Information Technology

Competency Statement: Can analyze and design an information system for a business.

Course Description: (Formerly IS 315) This course presents a structured approach to analysis and design of an information system for a business. The systems development life cycle will be defined and described. Process descriptions, user and task analysis for interface development, prototyping, data flow and entity relationship diagramming will be presented. Case studies that promote critical-thinking skills provide the context for these techniques. PREREQUISITE(S): none

IT 223: Data Analysis

Course required in the following tracks: SW Category

Competency Statement: Can apply statistical concepts and techniques to problems in IT areas using a statistical package for data analysis.

Course Description: (FORMERLY CSC 323) Application of statistical concepts and techniques to a variety of problems in IT areas and other disciplines, using a statistical package for simple data analysis. Course topics include descriptive statistics, elementary probability rules, sampling, distributions, confidence intervals, correlation, regression and hypothesis testing. PREREQUISITE(S): MAT 130 or placement

IT 231: Web Development I

Course required in the following tracks: E-Commerce, Information Technology, Interactive Media,

Competency Statement: Can apply web architecture and object-based databases to the design of interactive web sites.

Course Description: Introduction to framework-based web development. Students create interactive, dynamic web sites using a common web architecture and object-based database access. Programming for web development includes control structures, objects, functions, and use of composite data types. Prerequisite: IT 130

IT 240: Introduction to Desktop Databases

Course required in the following tracks: Information Systems, Information Technology

Competency Statement: Can design and implement desktop databases to integrate sources of data into various applications.

Course Description: This course will introduce students to the design, implementation and use of desktop databases. Major topics include: modeling using ER diagrams, creating and maintaining a database using a PC based application, compose and use queries in Structured Query Language, create and customize forms and reports, and integrate databases with other sources of data and applications. PREREQUISITE(S): NONE

IT 263: Applied Networks and Security

Course required in the following tracks: S1F competency

Competency Statement: Can design, build and maintain a small computer network using wired and wireless technologies and incorporate necessary networking and security issues.

Course Description: This course introduces the networking and security technologies required to build and maintain a home or small-office network. Networking topics will include client/server application software configuration, network connectivity (cabling, switch and router configuration), basic IP addressing, network address translation and options for public Internet access services. Security topics will include typical threats and responses, firewalls, host hardening, password management and virtual private network (VPNs). The course has a lab component where students apply wired and wireless technologies to design and administer a small network with various applications. PREREQUISITE(S): none

IT 378: Host and Information Security (See CNS 378)

IT 394 Software Projects for Community Clients I

Capstone Course option in the following tracks: Computer Science, E-Commerce, Information Systems, Information Technology, Interactive / Social Media, Network Technology, Security, Customized

Competency Statement: Written by academic committee.

This is the first course in a two-quarter sequence (winter/spring) for CDM students that satisfies both the Senior Year Capstone requirement and the Junior Year Experiential Learning requirement. The second quarter will be IT 395. You will earn four quarter hours of credit for each quarter for a total of eight quarter hours of credit. You must complete both quarters to receive any credit. We work with a community service organization, chosen with help of the Steans Center for Community-based Service Learning. As a community-based service learning course, students will have the opportunity to assess urban community needs in technology, and use problem-solving methods and strategies to make a substantial difference in an inner-city community group, usually by developing an application or a web site.

IT 395 Software Projects for Community Clients II

Capstone Course option in the following tracks: Computer Science, E-Commerce, Information Systems, Information Technology, Interactive / Social Media, Network Technology, Security, Customized

Competency Statement: Written by academic committee.

This is the continuation of IT 394. IT 394 and IT 395 must be taken as a sequence in two consecutive quarters. PREREQUISITE(S): IT 394

Math Course Competencies:

MAT 140: Discrete Mathematics I

Course required in the following tracks: Computer Science

Competency Statement: Can apply compound statements to digital logic circuits and computer arithmetic.

Course Description: The logic of compound statements, application to digital logic circuits and computer arithmetic, the logic of predicates and quantified statements, programming logic, elementary number theory and methods of proof, sequences and mathematical induction, algorithms, combinatorial reasoning, the binomial theorem. PREREQUISITE(S): MAT 130 or placement by the Mathematics Diagnostic Test.

Appendix B: BAC Learning Plan

BAC Learning Plan (Updated 7-8-16)

The plan that you develop in Foundations, and continue to revise with your Academic Committee, will help you track your B.A.C. degree. As you visualize and plan your program, you should place planned and finished evidence, such as courses and ILPs on your Learning Plan.

As you complete these plans, you will add the quarter and year you demonstrated the competencies and your grades. As a transcript, this represents a cumulative, evolving process of planned and revised learning that is finalized just prior to your last committee meeting.

When developing your Learning Plan please use the following codes in designating the kinds of evidence that has been accepted for demonstration of competency:

- **Learning Evaluation (LE):** signifies learning through work or life experience, including informal or unaccredited study.

- **Accredited Coursework (AC):** indicates a course taken at an accredited college or university other than SNL.

- **School for New Learning Course (SNLC):** designates courses taken at SNL.

- **College of Computing and Digital Media (CDMC):** designates courses taken at CDM.

Be sure to check the official record of your coursework ("course history") regularly against your evolving Learning Plan.

BACHELOR OF ARTS IN COMPUTING
LEARNING PLAN

Student:
Address:
Position:
Company:
Date Admitted:
Date of Graduation:
Student ID Number:
Phone:
Email:
Faculty Mentor:
Phone:
Email:
Professional Advisor:
Phone:
Email:
Advanced Project Advisor:
Address:
Position:
Company:
Phone:
Email:
Peer Advisor (Optional):
Position:
Company:
Phone (W):
Email:

EDUCATIONAL GOAL:

CAREER GOAL:

TITLE AND RATIONALE FOR BAC FOCUS AREA[1]:

ADVANCED PROJECT: The student's BAC Advanced Project results from an individually designed learning project and exhibits the student's ability to produce a work that is the culmination of her or his learning related to computing in the Focus Area. BAC student's also have a variety of capstone course options available from CDM to complete their F11 and F12 competencies depending on their Focus Area track. For more information, see the BAC Resource Guide.

EXTERNSHIP: The student's Externship results from an individually designed project, focusing on doing, making, or creating, and then reflecting on that learning process, an Externship class, or a travel course.

BAC Residence Requirement: SNL students in the BAC must complete at least 5 of their competency requirements as CDM courses at DePaul in addition to the SNL 13 competency residence requirement.

Signatures:
Student:
Faculty Mentor:
Professional Advisor:
Date Plan Presented:

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[1] A Focus Area title cannot replicate titles for DePaul University majors. Consult the following website for a listing of current academic majors at DePaul: http://www.depaul.edu/academics/undergraduate/majors/Pages/default.aspx

Also, for students who select the "Customized" the Focus Area track in the BAC program, they can create the title for their focus area but cannot replicate any of the "Specialized" Focus Area track names offered in the BAC program.

If a student does select a "Specialized" track, all the requirements of that track must be completed or the track must be withdraw before completing the program.

DePaul University - School for New Learning
Learning Plan: Written Competencies

THE BAC FOCUS AREA: This area contains competencies that fit the student's personal and professional goals as defined in an area of interest. See the BAC Resource Guide for Focus Area competency statements that relate to specific course requirements in the Specialized tracks.

COMPETENCY STATEMENT	EVIDENCE / MEANS OF ATTAINMENT	DATE PLANNED	DATE ACCEPTED	GRADE
F-1: Focused Planning: Can design a plan for development in one's Focus Area based on an analysis of elements that comprise the area.	LL 250: Foundations of Adult Learning: Developing Personal and Professional Identity			
F-X:				
F-X:				
F-X:				
F-X:				
F-X:				
F-X:				
F-X:				
F-X:				
F-X:				
F-11: Can design and produce a significant computing related product that gives evidence of advanced competency.	FA 303: Advanced Project or CDM Capstone Course			
F-12: Written by Academic Committee summarizing focus/content of the project.	FA 303: Advanced Project or CDM Capstone Course			

THE LIBERAL LEARNING AREA

Liberal Learning encompasses the knowledge, abilities and values associated with the liberal arts. Eight required competencies from each of the Human Community, Scientific World and Arts and Ideas categories must be satisfied within this area, and finally, two Advanced Electives.

THE ARTS AND IDEAS CATEGORY

The Arts and Ideas category encompasses knowledge, abilities and values that enhance the quality of one's life and lives of others. Competency in this category is developed through reflection on human living, philosophy, religion, aesthetic experiences, and performance in the arts. Courses of instruction in art, philosophy, religion, and literature may contribute to the attainment of these competencies, as well as participation in the arts, in leisure time activities and reflection. A Electives can come from any of the three Arts and Ideas sub-categories or their equivalent transfer courses or experiential learning.

COMPETENCY STATEMENT	EVIDENCE / MEANS OF ATTAINMENT	DATE PLANNED	DATE ACCEPTED	GRADE
A Elective:				
A Elective:				
A Elective:				
A Elective:				
A-4 Ethics in the Contemporary World: Can analyze a problem using two different ethical systems.				
A-5: Creativity: Can define and analyze a creative process.				

THE HUMAN COMMUNITY CATEGORY

The Human Community category encompasses knowledge, abilities and values associated with human relations and communications. Competency in the Human Community is often attained through work in-groups and/or organizations, from participation in civic and social groups, from reflection on these activities, and through careful analysis of the characteristics of human communities. Students also gain competency in the Human Community through courses of instruction or readings in history, literature, sociology, psychology, and economics. H Electives can come from any of the three Human Community sub-categories or their equivalent transfer courses or experiential learning.

COMPETENCY STATEMENT	EVIDENCE / MEANS OF ATTAINMENT	DATE PLANNED	DATE ACCEPTED	GRADE
H Elective:				
H Elective:				
H Elective:				
H Elective:				
H-4: Power & Justice: Can analyze power relations among racial, social, cultural, or economic groups in the United States.				
H-5: Globalization: Can analyze issues and problems from a global perspective.				

THE SCIENTIFIC WORLD CATEGORY

The Scientific World category encompasses knowledge, abilities and values associated with: technologies, physical and natural sciences, symbolic systems for describing the physical world: the environment. Competency in this category is often attained through work in scientific and technological fields, vocational interests and study of health and environment. Students also gain competency through courses of instruction in disciplines such as ecology, mathematics, geology, and natural science. S Electives can come from any of the three Scientific World sub-categories or their equivalent transfer courses or experiential learning.

BAC students are required by CDM to complete IT 223 and IT 263 in the SW category or complete these requirements as the CDM courses listed or through equivalent transfer courses, documentation of experiential learning, or through approved substitutions by the student's PA. The remaining SW requirements are completed using the same guidelines as all SNL students as described in the Foundations handbook.

COMPETENCY STATEMENT	EVIDENCE / MEANS OF ATTAINMENT	DATE PLANNED	DATE ACCEPTED	GRADE
S Elective:				
S Elective:				
S-2-H: Can apply statistical concepts and techniques to problems in IT areas using a statistical package for data analysis.	IT 223: Data Analysis Pre-req: MAT 130			
S-1-F: Can design, build and maintain a small computer network using wired and wireless technologies and incorporate necessary networking and security issues.	IT 263: Applied Networks & Security			
S 4: Interconnections in the Natural World: Can describe and explain connections among diverse aspects of nature.				
S 5: Scientific Reasoning: Can explain and evaluate the nature and process of science.				

BAC OPEN ELECTIVES

The Open Electives are available to serve multiple purposes for students in the BAC program. These competencies may be used to develop more depth in computing topics in addition to the Focus Area, as business or other non-Liberal Arts topics to help diversify the student's career goals, or can be used for placement of additional Liberal Learning competencies. Learning experiences for these competencies can be in the form of transfer courses, experiential learning competencies, or SNL competencies completed in SNL courses or FDIS from the Liberal Learning Area or Focus Area. The competency statements in this area are to be taken from existing statements or written by the academic committee.

COMPETENCY STATEMENT	EVIDENCE / MEANS OF ATTAINMENT	DATE PLANNED	DATE ACCEPTED	GRADE
EX 1: Written by Academic Committee.				
EX 2: Written by Academic Committee.				
EX 3: Written by Academic Committee.				
EX 4: Written by Academic Committee.				
EX 5: Written by Academic Committee.				
EX 6: Written by Academic Committee.				

ADVANCED ELECTIVES

Learning experiences for these competencies must be at an advanced level. Transfer courses must be at the junior or senior level. Other learning experiences must be sufficiently advanced to demonstrate synthesis of complex ideas, understanding of significant research in the field, and originality of perspective. These competencies can fit anywhere in the Arts and Ideas, Human Community, or Scientific World Categories.

COMPETENCY STATEMENT	EVIDENCE / MEANS OF ATTAINMENT	DATE PLANNED	DATE ACCEPTED	GRADE
E 1: Written by Academic Committee.				
E 2: Written by Academic Committee.				

THE LIFELONG LEARNING CATEGORY

Lifelong learning encompasses knowledge, abilities and values associated with learning throughout one's life. It includes the fundamental skills of reading, writing, speaking, and listening as well as complex abilities of goal setting, decision-making, and evaluation. These twelve competencies are acquired through all areas of human endeavor and are all required.

COMPETENCY STATEMENT	EVIDENCE / MEANS OF ATTAINMENT	DATE PLANNED	DATE ACCEPTED	GRADE
L-1: Can use independent learning skills and strategies to organize, initiate, and document prior, current, and future college-level learning.	LL 103: Independent Learning Seminar			
L-2: Can design learning strategies to attain goals for personal and educational development.	LL 250: Foundations of Adult Learning: Developing Personal and Professional Identity			
L-3: Can assess the social and personal value of civic engagement for achieving change.	L3 Civic Engagement (Fulfilled by SNL course)			
L-4: Can write to analyze, synthesize, and evaluate experiences and concepts to demonstrate competencies.	LL 260: Writing for Competency (Fulfilled by SNL course or Proficiency Exam)			
L-5: Can analyze and reconcile problems through critical and appreciative thinking.	LL 270: Critical Thinking (Fulfilled by SNL course or Proficiency Exam)			
L-6: Can use mathematical symbols, concepts, and methods to describe and solve problems.	LL 205: Quantitative Reasoning (Fulfilled by SNL course or Proficiency Exam)			
L-7: Can learn collaboratively and examine the skills, knowledge, and values that contribute to such learning.	Collaborative Learning: L7 in SNL course or equivalent transfer or experience			
L-8: Can pose questions and use methods of formal inquiry to answer questions and solve problems.	LL 300: Research Seminar			
L-9: Written by Academic Committee	LL 300: Research Seminar			
L-10: Can reflect on the learning process and methods used in an experiential project.	LL 302: Externship			
L-11: Written by Academic Committee	LL 302: Externship			
L-12: Can articulate the personal and social value of lifelong learning.	LL 390: Summit Seminar			

Appendix C: BAC Acronym List

APA	Advanced Project Advisor, person chosen to assist student with BAC Advanced Project assignment
BAC	Bachelor of Arts in Computing, joint degree program with the CDM
BACA	SNL BA Curriculum and Assessment Committee
BAECE	Bachelor of Arts in Early Childhood Edcuation, joint degree program with the SOE
BAGB	Bachelor of Arts in General Business, joint degree program with the COC
CDE	Also known as DE, the is the Center for Distance Education at SNL
CDM	College of Computing and Digital Media at DePaul
CLEP Exams	College Level Examination Program of the Testing Service; offers tests that can be transferred to SNL for credit.
COB	Driehaus College of Business at DePaul
FAL	Foundations of Adult Learning (course, or resources book)
FDIS	Faculty Designed Independent Studies. These are courses designed for students who seek more independence in furthering their knowledge, while having the structure of a designed course. See the course guide for more information and/or check the web for available learning opportunities.
FM	Faculty Mentor, SNL Resident Faculty member that serves as the student's key advisor
GIS	Guided Independent Study. A learning experience planned and accomplished with the help of a faculty member.
ILP	Independent Learning Pursuit. A project completed for credit outside of the classroom environment; submitted for competency assessment to TLA.
IRB	Institutional Review Board on Human Subjects Research
LP	Learning Plan. A detailed document outlining how a student will complete their SNL degree. Students develop this in Foundations and continue refining it through out their program.
LRB	SNL's Local Review Board for compliance with the university's IRB.
MSAT	Master of Science in Applied Technology, joint degree with CDM
PGAP	Professional Goal Setting and Action Plan, which is developed in Foundations, then reviewed and assessed in the First Committee Meeting (post Foundations)
PA	Professional Advisor, advisor from the student's chosen field that advises the student's focus area, in the BAC, PAs are assigned by CDM and are resident faculty
Proficiency Exams	Tests that can be taken in lieu of Academic Writing for Adults, Critical Thinking and Information Technology classes.
Service Learning	There are courses offered for Externship and other competencies that feature service learning. See the course guide for more information and/or check the web for available service opportunities. (Note that not all Externship courses are service related; some feature travel or other learning opportunities.)
SNL	School for New Learning at DePaul
Summit Seminar	This is an undergraduate's last learning experience at SNL. Students demonstrate the lifelong learning competency L12 in this all-day learning event.
TLA	Teaching, Learning and Assessment Committee. The body that evaluates all transfer class and ILP submissions to determine if they are acceptable for credit.