

Improving 2+2 Articulation in Florida

Since March, the Board of Governor's Select Committee on 2+2 Articulation has reviewed the statewide articulation law and policies, the pipeline of AA students coming to the State University System (SUS) from the Florida College System (FCS), and the performance of AA students within the SUS. At the Committee's September meeting, staff from the University of Central Florida and the University of South Florida described programs that have been developed in partnership with institutions from the Florida College System in order to increase access, provide greater clarity regarding pathways to completing a bachelor's degree, increase degree completion, and meet local workforce needs.

Following is an overview of four major components of 2+2 articulation: the academic transition, the admissions process, the cultural transition, and information on AA graduates. In addition, issues identified during previous Committee meetings are outlined along with potential solutions. In many instances, a single solution may address more than one issue.

The Committee will review the four areas along with associated issues and solutions. Following this review, the Committee will determine the issues most critical to address during a January workshop. During the workshop, the Committee will work with invited discussants to identify and develop appropriate solutions to the most critical issues.

1. Academic Transition

Currently, completing an AA at an FCS institution ensures that upon transferring to an SUS institution students will:

- be admitted as upper division students to at least one SUS institution,
- have fulfilled all general education requirements,
- will receive credit for at least 60 transfer credit hours, and
- receive priority admission over out-of-state students.

As part of the AA degree, students should also attempt to successfully complete any necessary prerequisite courses needed for the desired baccalaureate program. To assist students and advisors in identifying the necessary courses, the Articulation Coordinating Committee (ACC) partners with SUS and FCS institutions to develop, approve, and maintain the Common Prerequisites Manual, which is a compilation of program prerequisites (<https://dlss.flvc.org/manuals/common-prerequisite-manuals>). Common prerequisites are standardized across all SUS and FCS institutions to facilitate efficient transfer of lower-level academic credit. Typically, students are informed of all degree program common prerequisite requirements through the academic advising process.

Florida also utilizes a common course numbering system, which has been in place since the late 1960's. The database includes courses from all public institutions in Florida and participating nonpublic institutions. Each institution determines the title, credit, and content of its own courses and recommends the first digit of the course number to indicate the level at which students normally take the course. Course prefixes and the last three digits of the course numbers are assigned by members of faculty discipline committees appointed by the Department of Education. The primary purpose of the common course numbering system is to facilitate transfer among postsecondary institutions in Florida.

Issue 1: Determining program prerequisites may still be time-consuming and confusing for some students. As seen in Attachment 1, the prerequisite information for the B.S. in Biomedical Science from the Common Prerequisites Manual requires first-time users of the manual to determine what courses are required by looking elsewhere in the manual to learn what the X's stand for. After that, users must then determine whether the courses are available at the intended FCS institution.

Issue 2: Meeting program prerequisites for highly sequenced programs and those with lab or studio requirements - such as many STEM, healthcare, and fine arts programs - can be challenging and difficult to do in a timely manner, particularly for transfer students. Students who begin at an SUS institution in such fields are advised to complete prerequisites as freshman and sophomores to ensure timely progression through the program of study.

Issue 3: Though AA transfers students are guaranteed admission to at least one SUS institution, admission to a program is not guaranteed through the statewide articulation agreement. Students may be admitted as non-degree seeking students if program prerequisites or academic admission requirements for the program have not been met.

Sample Solution 1: Clearly communicate institution-specific course numbers for the general education core curriculum courses and common program prerequisite courses for SUS and FCS institutions and a recommended pathway for completing the requirements for both the AA degree and the bachelor's degree at specific institutions. See Attachment 2 for an example from the University of South Florida.

Sample Solution 2: Send SUS advisors to FCS campuses to provide on-site information about admission, general education and program requirements to better facilitate the transition.

Sample Solution 3: Provide on-going and/or on-demand training for FCS and SUS advisors to better assist new advisors and advisors who are new to Florida and ensure experienced advisors are updated on critical changes.

Sample Solution 4: Work with FCS institutions to develop joint programs in which students concurrently enroll to ensure that students follow an efficient pathway for completing a bachelor's degree.

2. Admissions Process

As previously noted, SUS applicants with an AA from an FCS institution are guaranteed admission to at least one SUS institution. The application process often entails completing admissions applications, sending transcripts, and paying an application fee in some instances.

Issue: The application process can be time-consuming and costly for students and institutions.

Sample Solution 1: Where possible, develop a streamlined admissions process with FCS institutions to reduce the steps required to complete the admissions process to SUS institutions.

Sample Solution 2: Waive application fees for AA applicants to reduce the financial burden.

Sample Solution 3: Send SUS staff to FCS campuses to assist with admissions and financial aid questions and applications.

3. Cultural Transition

Often there are cultural differences between institutions. The campus and class sizes may be larger at one institution compared to another. Processes and procedures often vary, at least somewhat, between institutions. Student services may be centrally located at some institutions and dispersed at others.

Issue: Transfer students often experience a form of shock when transferring because of cultural differences. Students who are accustomed to small campuses and classes may be overwhelmed on a larger campus. Students who work off-campus or have family obligations may have limited time to engage in events that help develop a sense of community.

Sample Solution 1: Make SUS services, events, and activities accessible to prospective AA transfer students and facilitate networking for these students at campus events.

Sample Solution 2: Host special events for prospective AA transfer students on SUS campuses.

Sample Solution 3: Hold information sessions on FCS campuses for AA students.

Sample Solution 4: Send SUS staff to FCS campuses to assist with the overall transfer process.

Sample Solution 5: Establish a central point of service on SUS campuses for transfer students.

Sample Solution 6: Provide scholarships to AA transfers to reduce financial burden.

4. Information on AA Graduates

A considerable amount of data regarding AA graduates is currently available, including the pipeline from the FCS to the SUS, demographic characteristics of AA transfer students, and SUS outcomes for AA transfers.

Issue 1: Actual student behavior cannot be adequately described through descriptive data.

Issue 2: Some questions have been raised that have not yet been answered due to the complexity of the questions, the limitations or complexity of data systems, and the availability of the necessary staff to compile and analyze the data.

Sample Solution 1: Review existing ongoing analyses to determine whether additional ongoing analyses are needed to support BOG planning efforts.

Current ongoing analyses include:

- AA transfer pipeline from FCS graduation to application, acceptance, and enrollment in SUS
- Top majors for AA transfers
- SUS outcomes for AA transfers (e.g., graduation rates, GPA)

Sample Solution 2: Identify and conduct special studies at the system (or institutional level if appropriate) to answer the most critical unanswered

questions identified by the Committee but not addressed by the ongoing analyses for BOG planning, such as:

- Where do AA graduates go who do not transfer into SUS?
- Where do AA graduates who are admitted into SUS but do not enroll go?
- Do students transfer without loss of credit?
- What are the SUS outcomes for AA transfers by program of study?

Attachment 1

Program: <u>Biomedical Sciences</u>	CIP: <u>26.0102</u>
Offered At: <u>FSCJ, USF</u>	Track: <u>1</u>
	Program Length: <u>120 Cr. Hrs.</u>

REVISED 10/22/08
 In 2011, changed prerequisites back to original prerequisites.
 REVISED 3/2/11
 Technical correction/addition March 2012

LOWER LEVEL COURSES

	Cr. Hrs.
— BSCX010/X010L	4
Or— BSCX010C	4
&— BSCX011/X011L	4
Or— BSCX011C	4
&— CHMX045/X045L	4
Or— CHMX045C	4
&— CHMX046/X046L	4
Or— CHMX046C	4
&— CHMX210/X210L	4
Or— CHMX210C	4
&— CHMX211/X211L	4
Or— CHMX211C	4
&— Take all courses	
&— PHYX053/X053L	4
&— PHYX054/X054L	4
Or— Take all courses	
&— PHYX053C	4
&— PHYX054C	
Or— Take all courses	
&— PHYX048/X048L	4
&— PHYX049/X049L	4
Or— Take all courses	
&— BSCX093/X093L	4
&— BSCX094/X094L	
Or— Take all courses	
&— BSCX093C	4
&— BSCX094C	4
&— MACX241	4
Or— MACX281	
Or— MACX311	4
&— MACX242	3
Or— MACX282	
Or— MACX312	4
Or— STAX023	3
Or— STAX024	3

(Please see notes in the following page)

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FOR ALL MAJORS: Students are strongly encouraged to select required lower division electives that will enhance their general education coursework and that will support their intended baccalaureate degree program. Students should consult with an academic advisor in their major degree area.

Attachment 2



GUARANTEED ADMISSION TO USF

COLLEGE OF ARTS & SCIENCES
BACHELOR OF SCIENCE: BIOMEDICAL SCIENCES

Catalog 2016/17



Students completing the following courses and requirements in combination with an AA from Hillsborough Community College will have automatically satisfied requirements to begin upper level coursework.

COLLEGE - ARTS & SCIENCES

Intended Program of Study- B.S. Biomedical Sciences

- Limited Access- **No**
- College Application Required- **No**
- Tests Required- **None**
- (College) Foreign Language Exit Required- **No**, however, beginning with students initially entering a Florida College System institution or state university in 2014-2015 and thereafter, coursework for an associate in arts degree shall include demonstration of competency in a foreign language

PRE-REQUISITE COURSES

(Common State Pre-requisites) (C or Higher in all courses; except where identified)

USF Courses

BSC 2010 & BSC 2010L
 BSC 2011 & BSC 2011L
 CHM 2045 & CHM 2045L
 CHM 2046 & CHM 2046L
 CHM 2210 & CHM 2210L
 CHM 2211 & CHM 2211L
 -Select one lecture/lab combo**
 PHY 2053 & PHY 2053L, or PHY 2048 & PHY 2048L,
 or BSC 2085 & BSC 2085L, or BSC 2093C
 -Select one lecture/lab combo**
 PHY 2054 & PHY 2054L or PHY 2049 & PHY 2049L
 or BSC 2086 & BSC 2086L, or BSC 2094C
 MAC 2241 or 2281 or 2311**
 MAC 2242 or 2282 or 2312 or STA 2023**

HCC Course Equivalent

BSC 2010 & BSC 2010L
 BSC 2011 & BSC 2011L
 CHM 2045 & CHM 2045L
 CHM 2046 & CHM 2046L
 CHM 2210 & CHM 2210L
 CHM 2211 & CHM 2211L
 -Select one lecture/lab combo**
 PHY 2053 & PHY 2053L, or PHY 2048 & PHY 2048L,
 or BSC 2085 & BSC 2085L, or BSC 2093C
 -Select one lecture/lab combo**
 PHY 2054 & PHY 2054L or PHY 2049 & PHY 2049L
 or BSC 2086 & BSC 2086L, or BSC 2094C
 MAC 2241 or 2281 or 2311**
 MAC 2242 or 2282 or 2312 or STA 2023**

Where needed, student must meet required pre-requisites for each course

**When there is more than one option listed, please consult your advisor to select the most appropriate course for you and your career goals.

Start Hillsborough Community College

The following course sequence is purely a suggested semester by semester plan for completion of requirements of the A.A. and pre-requisite courses. In cases where courses are not specified, students should consult the HCC advising guide to select the appropriate option A unique plan developed in consultation with an advisor at both HCC and USF may differ depending on student circumstances.

Note: In order to complete this degree at USF in 2 years, students must complete all state mandated prerequisites while completing AA coursework.

YEAR 1 HCC

FALL

ENC 1101 3
 CHM 2045 & 2045L 4
 MAC 2241 or MAC 2311 5

TOTAL: 12

SPRING

ENC 1102 3
 CHM 2046 & CHM 2046L 4
 MAC 2312 or STA 2023 3-5

TOTAL: 10-12

SUMMER

SPC 1608 3
 Humanities Core General Education 3
 Behavioral Science General Education 3

TOTAL: 9

YEAR 2 HCC

FALL

CHM 2210 & CHM 2210L 5
 BSC 2010 & BSC 2010L 4
 BSC 2085 & BSC 2085L 4
 History/Political Science General Ed 3

TOTAL: 16

SPRING

CHM 2211 & CHM 2211L 5
 BSC 2011 & BSC2011L 4
 Behavioral Science/History/Economics
 General Education 3
 Humanities General Education 3
 IDS 2891 1

TOTAL: 16

Graduate with A.A. from HCC

YEAR 2 Fall/Spring

USF START

YEAR 3 FALL USE

General Biochemistry (BCH 3053)	3
Upper-level BMS Bio/Chem Lab Elective (ex. BCH 3023L Basic Biochemistry Lab)	3
**General Physics I with lab (ex. PHY 2053/L)	3
Capstone FKL course	3
Upper-level USF Elective	3

TOTAL: 15

YEAR 3 SPRING USE

General Physics II with lab (ex. PHY 2054/L)	3
Upper-level BMS Biology Elective (ex. PCB 3063 General Genetics)	3
Upper-level USF Elective (ex. PCB 3063L Genetics Lab)	3
Writing Intensive FKL course	3
Upper-level USF Elective	3

TOTAL: 15

YEAR 4 FALL USE

Required Biomedical Elective (ex. MCB 3020/L General Microbiology with lab)	3
Additional BMS Chemistry or Bio Elective (ex. CHM 4300 Biomolecules I)	3
Upper-level USF Elective	3
Upper-level USF Elective	3
Upper-level USF Elective	3

TOTAL: 15

YEAR 4 SPRING USE

Upper-level BMS Chemistry Elective (ex. CHM 4292 Intro to Medicinal Chemistry)	3
Additional Biomedical Elective (ex. PCB 4234 Principles of Immunology)	3
Upper-level USF Elective	3
Upper-level USF Elective	3
Upper-level USF Elective	3

TOTAL: 15

**BSC 2085/BSC 2086 or BSC 2093/BSC2094 can be taken in place of PHY 2048/PHY 2049. Consult a USF advisor to determine the most suitable option for student specific goals.

The following is additional information for the College of Arts and Sciences:

Students interested in Biomedical Sciences may email ChemAdvise@usf.edu.

For general transfer advising inquiries please contact transfer-advising@usf.edu



Department of Chemistry | University of South Florida
Natural Sciences and Mathematics Advising Center | Tampa, FL 33620 | Phone: 813.974.3290
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