

AUBURN UNIVERSITY

Internal Memorandum

DEPARTMENT OF BIOLOGICAL SCIENCES

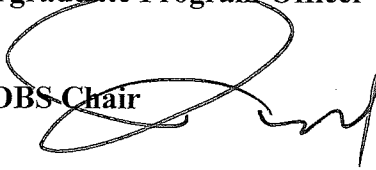
Date: 1/22/18

To: Kevin Snyder

From: Dr. Bob Boyd, Undergraduate Program Officer



Through: Dr. Jason Bond, DBS Chair



Through: Dr. Jack Feminella, Associate Dean for Academic Affairs, COSAM



Through: Dr. Nicholas Giordano, Dean, COSAM



RE: New AU Bulletin entries for Pre-Health degrees for departmental majors

The Department of Biological Sciences (DBS) is introducing a new course that will be required for all its majors. This new course, Professional Development (BIOL 2100), will be an important stepping stone for our students. The course is designed to improve student success both here at Auburn and after graduation.

We have added this course to DBS curricula in the Bulletin, but there are two curricula that we have not yet integrated into this plan. These curricula are taken by Pre-Health majors, but they have an option of declaring a specialty major within our department (below). Because these students are considered DBS majors, we would like them to include our BIOL 2100 course in their curricula. This change will provide them with the benefits of that course, and also allow us to integrate those students into our programs and include them in our departmental assessment data.

The affected curricula are:

- 1) Pre-Physical Therapy (PPHS) and Pre-Physician Assistant (PPAT), and
- 2) Pre-Dentistry (PDEN), Pre-Medicine (PMED) & Pre-Optometry (POPT) curricula.

I am attaching the curriculum models as they are used by our COSAM Student Services Office. Students in these curricula can "major" in our Organismal Biology (IBIO) or Microbial, Cellular, & Molecular Biology (MCMB) majors by selecting certain suites of elective courses in their Junior and/or Senior years. However, to be integrated into those majors, students must BIOL 2100 in either the Fall or Spring of their Sophomore year (that timing should place the BIOL 2100 course into the Sophomore semester with the smallest course load).

As you recall, you suggested that new Bulletin entries be created so that the BIOL 2100 course could be shown in these curricula as they would be taken by IBIO or MCMB majors. The memo requests that this action be taken so that these majors are more accurately represented in the Bulletin.

NAME: _____

ID#: _____

IN EFFECT FALL 2017**PRE-DENTISTRY (PDEN), PRE-MEDICINE (PMED) & PRE-OPTOMETRY (POPT)
CURRICULUM****FRESHMAN YEAR**

ENGL 1100 English Comp I	3	ENGL 1120 English Comp II	3
MATH 1610 Calculus I	4	CORE HISTORY I	3
CHEM 1030 Fund. of Chemistry I ¹	3	CHEM 1040 Fund. of Chemistry II ¹	3
CHEM 1031 Chem I Lab.....	1	CHEM 1041 Chem II Lab.....	1
BIOL 1020 Principles of Biol.....	3	BIOL 1030 Organismal Biol.....	3
BIOL 1021 Principles of Biol Lab	1	BIOL 1031 Organismal Biol Lab.....	1
SCMH 1890 Pre-Health Orientation	1		
	16		14

SOPHOMORE YEAR

CHEM 2070 Organic Chem I	3	CHEM 2080 Organic Chem II	3
CHEM 2071 Organic I Lab	1	CHEM 2081 Organic II Lab	1
CORE HISTORY II.....	3	BIOL 3000 Genetics	4
PHYS 1500 Physics I.....	4	PHYS 1510 Physics II.....	4
CORE LITERATURE	3	COMM 1000 Public Speaking.....	3
	14		15

JUNIOR YEAR

BIOL 3200 Microbiology	4	BIOL4100 Cell Biology	3
STAT 2510 Statistics for Biol	3	BIOL4101 Cell Biology Lab	2
PSYC 2010 Intro. to Psychology	3	PHIL1030 Ethics & Health Science.....	3
CORE FINE ARTS.....	3	CORE SOCIAL SCIENCE ²	3
BCHE 5180 Biochemistry I.....	3	BCHE 5190 Biochemistry II.....	3
	16		14

SENIOR YEAR

Major	14	Major.....	10
		Elective ³	7*
	14		17

TOTAL HOURS 120

Long range schedules for COSAM courses are online at www.auburn.edu/cosam/students/

Courses in **BOLD** will be used to calculate GPA in major.

Options for courses labeled CORE are in the Auburn University Bulletin (www.auburn.edu/bulletin) under Core Curriculum.

Students should declare a major in the semester they earn 60 hours. See the back of this sheet for majors.

Students must complete all requirements for that major prior to graduation.

Students planning a Physics major should consult with the pre-health advisor.

¹ The Chemistry 1110/1111-1120/1121 sequence can substitute for CHEM1030/1031-1040/1041. See advisor for details.

² Students who have AP or transfer credit for US History should see an advisor for CORE SOC SCI choices.

³ Total electives required may change with choice of major. See PHYS, and IBIO requirements on back of sheet.

SCIENCES AND MATHEMATICS PRE-MED, PRE-DENT, PRE-OPT Major Requirements

BIOMEDICAL SCIENCES: BMSC

- Must complete:
 - **BIOL 5500** (3 hours)
 - **BIOL 5600** (5 hours)
 - **2 hours** of undergraduate research
 - **4 hours** professional elective chosen from the following:
 - Foreign Language at 1010 or above
 - BIOL 2500
 - any 3000+ level course in BIOL, CHEM or PHYS
- Must complete **10 hours** chosen from the following:
 - **BIOL 3010** (Comparative Anatomy- 3 hrs)
 - **BIOL 3011** (Comparative Anatomy- 1 hr)
 - **BIOL 4000** (Histology- 3 hrs)
 - **BIOL 4001** (Histology lab- 1 hr)
 - **BIOL 4410** (Vert. Development- 5 hrs)
 - **BIOL 5110** (Parasitology- 4 hrs)
 - **BIOL 5200** (Clinical Micro- 5 hrs)
 - **BIOL 5230** (Virology- 3 hrs)
 - **BIOL 5280** (Genethics- 3 hrs)
 - **BIOL 5330** (Developmental Genetics- 3 hrs)
 - **BIOL 5521** (Gene Express. Lab -2 hrs)
 - **CHEM 3050** (Analytical Chem- 3 hrs)
 - **CHEM 3160** (Physical Chem.- 3 hrs)
 - **Undergraduate Research** (no more than 2 additional hours)*
 - **SCMH 3810 or 3890** (Preceptorships)
 - **SCMH 5940** (Global Study/Travel Abroad in COSAM)

**Note: no more than 6 credit hours total of Undergraduate Research will be counted towards any degree.*

CHEMISTRY: CHEM, BA

- Please refer to the CHEM, B.A. model designated for PMED, PDEN & POPT concentrations.

MICROBIOLOGY: MCMB

- Must complete **BIOL 5200, 5260, 5250, 5500.**
- Must complete **9 hours** chosen from the following: **BIOL 3020, 4000, 4001, 4410, 4970** (maximum of 4 hours), **4980** (maximum of 6 hours), **5110, 5210, 5230, 5501, 5521, 5600, 5660, 5700.**

PHYSICS: PHYS

- Must complete **MATH 1620** (in place of STAT 2510), **2630**, and **2650.**
- Must complete **PHYS 1607 & 1617** (in place of PHYS 1500 & 1510), **PHYS 2200, 2100, 2300, 3100, 3200, and 3500.**
- Physics majors only need 6 hours of free elective.

ORGANISMAL BIOLOGY: INTEGRATIVE BIOLOGY

- Must complete: **BIOL 3030, 3060, and 3010+3011.**
- Must complete **2** of the following: **BIOL 4000+4001, 4010, 4020, 4410, 5110.**
- Must complete **BIOL 5600.**
- Organismal Biology majors need 7 hours of free elective. Choosing BIOL 4410 means you only need 6 hours of free elective.

IN EFFECT FALL 2017**PRE-PHYSICAL THERAPY (PPHS) & PHYSICIAN ASSISTANT (PPAT) CURRICULUM****FRESHMAN YEAR**

ENGL 1100 English Comp I	3	ENGL 1120 English Comp II	3
MATH 1610 Calculus I	4	CORE HISTORY I	3
CHEM 1030 Fund of Chem I ¹	3	CHEM 1040 Fund of Chem II ¹	3
CHEM 1031 Chem I Lab.....	1	CHEM 1041 Chem II Lab.....	1
BIOL 1020 Principles of Biol	3	BIOL 1030 Organismal Biol.....	3
BIOL 1021 Principles of Biol	1	BIOL 1031 Organismal Biol Lab.....	1
SCMH 1890 Pre-health Orient	1		
	16		14

SOPHOMORE YEAR

CHEM 2070 Organic Chem I ³	3	BIOL 3000 Genetics	4
CHEM 2071 Organic I Lab	1	PSYC 2010 Intro to Psychology	3
CORE HISTORY II.....	3	CORE SOCIAL SCIENCE ²	3
PHYS 1500 Physics I.....	4	PHYS 1510 Physics II.....	4
CORE LITERATURE	3		
COMM 1000 Public Speaking.....	3		
	17		14

JUNIOR YEAR

BIOL 2500 Anat & Phys I.....	4	BIOL 2510 Anat & Phys II.....	4
BIOL 3200 Microbiology	4	Psychology Elective	3
STAT 2510 Statistics	3	PHIL 1030 Ethics & Health Sciences	3
PSYC 3120 Developmental Psych	3	Major	4*
CORE FINE ARTS.....	3	*(subtract one hour of Major if BMSC Major)	
	17		14

SENIOR YEAR

Major	11	Major	10
Elective	5	Elective.....	2*
	16	*(add one hour of Elective if BMSC Major)	
			12

TOTAL HOURS 120

Long range schedules for COSAM courses are online at www.auburn.edu/cosam/students/

Courses in **BOLD** will be used to calculate GPA in major.

Options for courses labeled CORE are in the Auburn University Bulletin (www.auburn.edu/bulletin) under Core Curriculum.

Students must complete all requirements for the major prior to graduation.

Students planning a Physics major should consult with the pre-health advisor.

¹ The Chemistry 1110/1111-1120/1121 sequence can substitute for CHEM1030/1031-1040/1041. See advisor for details.

² Students who have AP or transfer credit for US History should see an advisor for CORE SOC SCI choices.

³ Students planning a major in Biomedical Sciences should take CHEM 2080/81 as their professional elective in their sophomore or junior year. (See reverse side)

SCIENCES AND MATHEMATICS PRE-PHYSICAL THERAPY & PRE-PHYSICIAN ASSISTANT MAJOR REQUIREMENTS

BIOMEDICAL SCIENCES: BMSC

- Must complete:
 - **BCHE 5180** (3 hours)
 - **BCHE 5190** (3 hours)
 - **BIOL 5500** (3 hours)
 - **BIOL 5600** (5 hours)
 - **2 hours of undergraduate research** (2 hours)
- Must complete professional elective: **CHEM 2080+2081** (4 hours).
- Must complete either **BIOL 3010+3011 or 4000+4001** (4 hours).
- *Note: Biomedical Science Majors will have 24 hours of Major requirements and 8 hours of General Electives.*

MICROBIOLOGY: MCMB

- Must complete **BIOL 5200, 5220, 5230 and 5500**.
- Must complete **11 hours** chosen from the following: **BIOL 3020, 4000, 4001, 4970** (maximum of 4 hours), **4980** (maximum of 4 hours), **5110, 5190, 5210, 5250, 5340, 5501, 5521, 5600, 5660, 5700; BCHE 5180, 5181, 5190, 5191**.

PHYSICS: PHYS

- Must complete **MATH 1620, 2630, and 2650**.
- Must complete **PHYS 1607 & 1617** (in place of PHYS 1500 & 1510), **PHYS 2200, 2100, 2300, 3100, 3200, and 3500**.

ORGANISMAL BIOLOGY

- Must complete **11 hours** chosen from the following: **BIOL 3030, 3060, 4010, 4020**.
- Must complete **8 hours** chosen from the following: **BIOL 3010, 3011, 4000, 4001, 5110**.
- Must complete **BIOL 5600**.

Kevin Snyder

From: Robert Boyd
Sent: Monday, January 22, 2018 11:52 AM
To: Kevin Snyder
Cc: Nicholas Giordano; John Feminella; Jason Bond; Robert Boyd
Subject: New Bulletin entries for DBS Pre-Health majors
Attachments: AU_Bulletin_memo.doc; ATT00001.htm; pmed_pden_popt.pdf; ATT00002.htm; pphs_ppat.pdf; ATT00003.htm

Hi Kevin:

Attached please find a memo that requests new Bulletin entries be created.

These new entries are needed because our department is requiring all our majors to take our new BIOL 2100 (Professional Development) course, and some Pre-Health majors (those who are declaring MCMB or IBIO options) will need to take that course in their sophomore year.

Thus BIOL 2100 should be listed in their curricula.

I'm copying this to all the administrators listed in the memo so they will know of this request.

Please let me know if you have any questions.

Thanks,

Bob