

# Cover Sheet: Request 11249

## BSC 3096: Add CHM 1031 as prereq alternative

### Info

Process	Course Modify Ugrad/Pro
Status	Pending
Submitter	Julian,David djulian@ufl.edu
Created	11/4/2016 2:13:24 PM
Updated	12/6/2016 9:36:00 AM
Description of request	BSC 3096 will meet the needs of students in the UF Online Biology BA, who can take the CHM 1030/1031 sequence as an alternative to the CHM 2045/2046 sequence. Therefore, we are requesting to add CHM 1031 as a possible prerequisite for BSC 3096.

### Actions

Step	Status	Group	User	Comment	Updated
Department	Approved	CLAS - Biology 011690003	Oppenheimer, David G		11/4/2016
No document changes					
College	Recycled	CLAS - College of Liberal Arts and Sciences	Pharies, David A	This item has been conditionally approved pending the following change: <ul style="list-style-type: none"> <li>The CCC feels that the formulation of the desired change is misleading. Suggestion: "Therefore, we are requesting to add CHM 1031 as a possible prerequisite for BSC 3096."</li> </ul>	11/29/2016
Replaced BSC3096_Prereq_Memo.pdf					11/7/2016
Added BSC3096_Prereq_Memo.pdf					11/7/2016
Department	Approved	CLAS - Biology 011690003	Davis, Ellen C		12/6/2016
No document changes					
College	Approved	CLAS - College of Liberal Arts and Sciences	Pharies, David A		12/6/2016
No document changes					
University Curriculum Committee	Pending	PV - University Curriculum Committee (UCC)			12/6/2016
No document changes					
Statewide Course Numbering System					
No document changes					
Office of the Registrar					
No document changes					

Step	Status	Group	User	Comment	Updated
Student Academic Support System					
No document changes					
Catalog					
No document changes					
College Notified					
No document changes					

# Course|Modify for request 11249

## Info

**Request:** BSC 3096: Add CHM 1031 as prereq alternative

**Description of request:** BSC 3096 will meet the needs of students in the UF Online Biology BA, who can take the CHM 1030/1031 sequence as an alternative to the CHM 2045/2046 sequence. Therefore, we are requesting to add CHM 1031 as a possible prerequisite for BSC 3096.

**Submitter:** Julian,David djulian@ufl.edu

**Created:** 11/4/2016 2:13:24 PM

**Form version:** 1

## Responses

**Current Prefix**BSC

**Course Level**3

**Number** 096

**Lab Code** None

**Course Title** Human Physiology

**Effective Term** Earliest Available

**Effective Year** Earliest Available

**Requested Action** Other (selecting this option opens additional form fields below)

**Change Course Prefix?**No

**Change Course Level?**No

**Change Course Number?**No

**Change Lab Code?**No

**Change Course Title?**No

**Change Transcript Title?**No

**Change Credit Hours?**No

**Change Variable Credit?**No

**Change S/U Only?**No

**Change Contact Type?**No

**Change Rotating Topic Designation?**No

**Change Repeatable Credit?**No

**Change Course Description?**No

**Change Prerequisites?**Yes

**Current Prerequisites**CHM 2046 AND (BSC 2011 OR APK 2105C)


**Proposed Prerequisites**(CHM 2046 OR CHM 1031) AND (BSC 2011 OR APK 2105C)

**Change Co-requisites?**No

**Rationale**The CHM 1030/1031 sequence will provide sufficient prerequisite chemistry background.

7 November 2016

To: CLAS Curriculum Committee

From: David Julian 

Re: Prereq change request for BSC 3096

To confirm that CHM 1030/1031 would cover the chemistry concepts that we believe are fundamental to a 3000-level human physiology course, I contacted Melanie Viege, who currently teaches the course sequence. I provided her with a list of concepts and asked whether each is typically covered, and if so, whether it is taught qualitatively or quantitatively. Her responses, which are listed below, indicate that almost all of the concepts are covered in sufficient detail, and mostly quantitatively. The only exceptions are the Nernst equation and free energy, which we can introduce as necessary in our course.

- **Molarity:** yes, quantitative (molarity, ppm, ppb, m/m m/v and v/v%)
- **Stoichiometry:** yes, quantitative; includes solution stoichiometry, limiting reactant, percent yield
- **Covalent and ionic bonds:** yes; Lewis structures, electron configuration, electronegativity, VSEPR, resonance, polarity
- **Chemical equilibrium** (incl. Le Chatelier's principle): yes; equilibrium constant quantitatively; le Chatelier's principle qualitatively
- **Acids and bases** (incl. pH, buffers, and H-H equation): yes to everything, quantitatively
- **Solubility** (incl. gas solubility): yes, including gases; Henry's Law is covered qualitatively
- **Colligative properties** (incl. osmotic pressure, freezing point and boiling point): yes, quantitatively
- **Gas laws** (esp., ideal gas law): yes, quantitatively
- **Electrochemistry** (incl. Nernst equation): covers oxidation numbers, redox reactions and applications in metabolism and energy production: no Nernst equation or galvanic cells or batteries
- **Thermodynamics** (incl. Gibb's free energy and activation energy): we cover enthalpy quantitatively (bond dissociation energies; thermochemical equations); no coverage of free energy; discuss activation energy in the context of energy diagrams, reaction rates and equilibrium (qualitative)