## SOUTHERN WEST VIRGINIA COMMUNITY AND TECHNICAL COLLEGE SIP-2171.C

## Faculty Qualifications Including Tested Experience Teaching Field: Science

**REFERENCE:** SIP-2171, Faculty Credentialing and Tested Experience

SCP-2171, Professional and Educational Requirements for Faculty

SCP-2171.A, Faculty Credentials Certification Form

**ORIGINATION:** August 9, 2018

**EFFECTIVE:** September 10, 2019

**REVIEWED:** New

The School of Arts and Sciences at Southern West Virginia Community and Technical College is committed to the highest standards of instructional delivery by assuring the qualifications of our faculty. It is our commitment that every student will have a faculty member who has solid preparation and experience to effectively teach in each program. Extensive efforts will be made to hire fully qualified candidates meeting the traditional preparation pathway below but there may be the need to determine faculty qualifications though tested experience. The School of Arts and Sciences will stride to limit the number of faculty hired through tested experience and will not appoint a faculty using tested experience if a traditionally prepared faculty is not appointed as a mentor.

## Guidelines for determining Faculty Qualifications:

Traditional Preparation:

- 1. A Master's Degree (or higher) in any of the following areas within the teaching field of Science: Biology, Chemistry, Biochemistry, Physical Science, Environmental Science, Astronomy, Physics, Engineering, Geology, or Agriculture.
- 2. A Master's Degree (or higher) in any field with 18 graduate hours in Biology, Chemistry, Biochemistry, Physical Science, Environmental Science, Astronomy, Physics, Engineering, Geology, or Agriculture.

## Tested Experience:

Faculty candidates who do not meet the academic credentials specified in the traditional preparation above but who have extensive experience in the field may qualify through tested experience. Faculty must have a Master's degree and must provide evidence that they demonstrate sufficient content expertise necessary to teach students in the discipline.

In order to determine if a faculty member qualifies under tested experience, he/she must submit a portfolio of experience for evaluation. In a cover letter for the portfolio the individual will reflect upon their experience and fully explain which of the tested experience criteria they meet. The portfolio will be reviewed by the Science program team and the Dean of the School. If a faculty is granted permission to teach within the discipline, the program team will assign a mentor to the faculty meeting qualifications through tested experience to ensure content expertise.

Validation of student success at advance levels will be reviewed each semester during the first year and annually after that along with formal evaluation of faculty as required by SCP-2218, Evaluation of Full-Time Faculty. The faculty member must sufficiently demonstrate content expertise by the end of his/her third year to continue teaching in the discipline. Faculty not meeting content expertise by the end of year three will be removed as a qualified instructor in the discipline.

To qualify under Tested Experience, the faculty candidate must have a Master's Degree in any field and must satisfy either:

- one (1) of the three Group A criteria and two (2) of the Group B criteria, or
   two (2) of the Group A criteria and one (1) of the Group B criteria.
   Consideration may be given to candidates with three (3) of the Group B criteria.

#	Group A Criteria	Evidence Required	
1	At least 12 graduate credit hours in Biology,	Graduate transcript	
	Chemistry, Biochemistry, Physical Science,		
	Environmental Science, Astronomy, Physics,		
	Engineering, Geology, Agriculture		
2	Bachelor's Degree in science	Transcript	
3	Fellowships, awards, or recognitions for excellence	Letter or certificate attesting to the	
	related to the teaching of science at the collegial-	award or recognition and the degree of	
	level from national or state professional	collegial-level outcomes.	
	organizations.		

#	Group B Criteria	Evidence Required
1	Six or more semesters of successful high school	Student and supervisor course
	Advanced Placement or college science teaching	evaluations affirming teaching
	experience.	effectiveness and documentation of
		advanced (collegial level) content.
2	Six or more years of experience teaching high	Student and supervisor course
	school science courses with collegial-level	evaluations affirming teaching
	outcomes.	effectiveness and documentation of
		advanced (collegial level) content
3	Three (3) or more years of work experience in the	Letter from supervisor or client
	field.	attesting to effective field related
		performance and documentation of
		advanced performance.
4	Peer reviews affirming science teaching	Three or more letters of
	effectiveness.	recommendation from faculty or
		administrators who have observed the
		faculty member effectively teaching
		advanced (collegial level) outcomes.
5	Extensive presentations at national, regional, or state	Paper shared at conference and
	peer-reviewed science conferences/workshops	conference proposal with presenter
	showcasing collegial-level content.	letter of acceptance, presenter
		certificate or similar evidence.
6	Extensive participation in nationally normed science	Letter from organization, certificate, or
	assessment activity, such as Advanced Placement	similar evidence to document collegial
	scoring in science, item writing for national science	level performance.
	competition at the collegial-level.	
6	Extensive leadership in collegial-level science	Letter of appointment, organizational
	professional organization.	chart, or similar evidence.
7	Evaluator of grants or other scholarly function in a	Letter from grant administrator, or
	collegial-level science-related study/project.	similar evidence.
8	Publications of collegial-level peer-review books,	Copy of publications
	journal articles, or similar publications in the field	
	or peer-reviewer of nationally recognized	
	publications.	
9	Participation in equivalent of 18 credit hours of	Certificates of completion.
	science-related professional development.	

1	0	Other collegial-level science related professional	Evidence must document experience is
		activity not listed above that demonstrate such	sufficient to prove content expertise.
		experience is sufficient to determine the faculty	
		member has the content expertise necessary to teach	
		students in the science discipline to obtain student	
		learning outcomes.	

The chart is intended to match the Degrees or Tested Experience to the courses being taught.

Qualification Alignment							
Degree or Tested Experience	Biology Biochemistry Environmental Science	Chemistry Biochemistry	Physics Physical Science Agriculture Geology Astronomy	Physics Engineering			
Course Prefix	BS	СН	SC	PH			