

Unit Operational Plan

Due March 22nd, 2024

2024-2025

Name of Unit: Biology/Shelby

Primary Purpose (for the unit): The department of Biology aims to remain consistent in support of the mission of Jefferson State Community College through a broad range of biology course offerings appropriate for students majoring in both science and non-science disciplines.

Unit Goals

Unit Goals	Unit Outcome	Institution Strategic Plan	Fundamental Principles
Maintain an informed and professional faculty to preserve the ability to offer courses that help students meet their educational and transfer goals.	Provide quality instruction through continued professional development opportunities.	IV.B-Increase opportunities for professional development for all employees.	FP 4.3-A working environment that supports employee wellness and job satisfaction. FP 4.4-Continual improvement through ongoing evaluation and advocacy of innovation in teaching and learning(through professional development).
Maintain adequate instructional material/equipment for classroom and laboratories as needed.	Increase learning and provide quality teaching and learning environments for faculty and students through maintaining classroom/laboratory spaces and equipment.	III.B-Continue to improve aesthetics and infrastructure at all campuses.	FP 4.3- A working environment that supports employee wellness and job satisfaction.
Update classrooms and laboratories as needed.	Increase learning and provide quality teaching and learning environments for faculty and students through maintaining classroom/laboratory	III.B-Continue to improve aesthetics and infrastructure at all campuses.	FP 4.3- A working environment that supports employee wellness and job satisfaction.

	spaces and equipment.		
Maintain adequate Laboratory material/equipment (Microscopes) as needed.	Increase learning and provide quality teaching and learning environments for faculty and students through maintaining classroom/laboratory spaces and equipment.	III.B-Continue to improve aesthetics and infrastructure at all campuses.	FP 4.3- A working environment that supports employee wellness and job satisfaction.
Support peer instructor evaluations to improve faculty instruction.	Implement peer instructor evaluations 1-2 times an academic year to allow partnering instructors an opportunity to evaluate each other's online resources and in-class experiences, resources, and assessment results.	II.A- Increase the Fall-to-Fall Retention Rate. IV.B- Increase opportunities for professional development for all employees.	FP. 3.4- Student, academic, developmental and support services that assist students in achieving their goal. FP. 4.4- Continual improvement through ongoing evaluation and advocacy of innovation in teaching and learning.
Establish a faculty-student mentoring system/program.	Implement instructor evaluation and mentoring system 1-2 times a year to allow participating instructors an opportunity to encourage and cultivate students' experience when recognizing a student that may need/desire additional instruction/tutoring to help them matriculate successfully through courses and/or chosen programs.	II.A- Increase the Fall-to-Fall Retention Rate.	FP. 3.4- Student, academic, developmental and support services that assist students in achieving their goal

Unit Operational Plan for 2024-2025

1. **Goals** – The activities through which the outcome will be achieved. Each Unit Outcome should have at least one goal.
2. **Method of Assessment** – How the unit will determine if the objective has been met.
3. **Funding/Rationale** – Provide an estimate of the cost of achieving the objective. Also, include a description of how these funds will be used to accomplish the objective.

Goal	Assessment	Funding/Rationale
Maintain an informed and professional faculty to preserve the ability to offer courses that help students meet their educational and transfer goals	Survey faculty to determine areas of interest for professional development. Review faculty Individual Action Plans for meaningful professional development needs and ask those who have attended conferences to share their knowledge (At minimum, one faculty member attends a national conference or professional development).	\$3000/year There are six (6) full-time faculty in the department.
Maintain adequate instructional material/equipment for classroom and laboratories as needed.	Instructional equipment will be updated/added based on feedback with faculty requesting additional mechanical/movable white boards for the classroom (to aid in note-writing while projectors are being used).	New boards will cost approximately \$585(x2) = \$1170
Update classrooms and laboratories as needed.	<p>*A- Add new models for BIO-104 labs as a instructional tool for course content added to the educational system competencies. New laboratory specimen models will be used during laboratory exams. Informal feedback between students and instructors and end of semester course evaluations concerning adequate course materials. (New Vendor Needed as Current Vendor does not carry these items).</p> <p>*B- Add dissection/utility carts for the biological labs to hold and transport anatomical models or lab materials during class and lab exams.</p> <p>*C- Add new equipment attachments to our current Vernier science technology system to use in our biology lab course content.</p>	<p>*A- New BIO-104 Models: -Development of Hat Fungi Model: (\$1,005) -SOMSO Marchantia Polymorpha model: (\$689) -SOMSO Scotch Pine Male & Female Models: (\$682/\$532 respectively) {Total=\$2908}</p> <p>*B- Rubbermaid Heavy-Duty Utility Carts: ~\$800(x3)= {\$2400}</p> <p>*C- Vernier Equipment: -Go Direct SpectroVis Plus Spectrophotometer (\$500) -Go Direct Hand Dynamometer (\$130 x 2=\$260) {Total=\$760}</p>
Maintain adequate Laboratory material/equipment	Maintenance and cleaning of the microscopes used in the biology laboratories will be done to keep them working properly.	There are a total of 195 scopes housed in our biology labs; approximate cost is \$4600

(Microscopes) as needed.		
Support peer instructor evaluations to improve faculty instruction.	The peer-review process will allow instructors to share ideas and identify best practices. Survey faculty for participant feedback	No funding needed.
Establish a faculty-student mentoring system/program.	Instructors will provide/share ideas with students that have been shown to be effective through a set of best practices. Instructors will continue to provide one-on-one tutoring and advice for those students who seek additional assistance. Study/review student learning outcomes(SLOs) to determine how courses can be improved; and implement changes to SLOs and assessments.	No Funding needed.