College of Undergraduate Studies
Academic Learning Compacts

Applied Science - B.A.S.

Discipline Specific Knowledge, Skills, Behavior and Values

1. Students in the Information Technology track and the Software Development track will gain an understanding of project management.
2. Students in the Information Technology track and the Software Development track will be able to develop effective written communication targeted to appropriate audiences.
3. Students in the Information Technology track and the Software Development track will understand how to effectively design a database system using Entity Relationship Diagrams and Normalization through Logical Database design.
4. Students in the Information Technology track and the Software Development track will understand how to effectively implement a database system, and how to effectively develop software applications requiring the use a database system.
5. Students in the Information Technology track will be able to choose appropriate technologies for implementing wide-area networks.
6. Students in the Information Technology track will understand the theoretical and regulatory aspects (communication protocols, network design, government regulations, etc.) involved in the design of wide area networks.
7. Students in the Software Development track will demonstrate theoretical and practical understanding of the commonly used SDLCs (Software Development Life Cycle) and of Object Oriented Analysis and Design (OOAD), Object Oriented Programming, and Object Oriented Principles.
8. Students in the Software Development track will be able to work on distributed teams using current software version-control tools.
9. Students in the BAS major will have a high level of satisfied with their academic learning and program of study.

Critical Thinking

1. Students in the Information Technology track and the Software Development track will understand how to effectively design a database
system using Entity Relationship Diagrams and Normalization through Logical Database design.

2. Students in the Information Technology track and the Software Development track will understand how to effectively implement a database system, and how to effectively develop software applications requiring the use a database system.

3. Students in the Information Technology track will be able to choose appropriate technologies for implementing wide-area networks.

4. Students in the Information Technology track will understand the theoretical and regulatory aspects (communication protocols, network design, government regulations, etc.) involved in the design of wide area networks.

5. Students in the Software Development track will demonstrate theoretical and practical understanding of the commonly used SDLCs (Software Development Life Cycle) and of Object Oriented Analysis and Design (OOAD), Object Oriented Programming, and Object Oriented Principles.

6. Students in the Software Development track will be able to work on distributed teams using current software version-control tools.

**Communication**

1. Students in the Information Technology track and the Software Development track will be able to develop effective written communication targeted to appropriate audiences.

2. Students in the Information Technology track will be able to choose appropriate technologies for implementing wide-area networks.

3. Students in the Information Technology track will understand the theoretical and regulatory aspects (communication protocols, network design, government regulations, etc.) involved in the design of wide area networks.

4. Students in the Software Development track will be able to work on distributed teams using current software version-control tools.

**Assessment of Applied Science - B.A.S. Outcomes**

These outcomes will be assessed using a variety of assessment methods, including:

- Tests
- Research projects
- Papers
- Oral and written presentations
- Portfolios
- Presentation rubrics