Texas A&M University **Marketable Skills**

Program:	Genetics
Degree:	BS
Department:	Biochemistry & Biophysics
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Outcome	Master the depth of knowledge required for a degree
Marketable Skills	- Plan or conduct basic genomic and biological research related to areas such as regulation of gene expression, protein interactions, metabolic networks, and nucleic acid or protein complexes. - Maintain laboratory notebooks that record research methods, procedures, and results. - Prepare reports or recommendations, based upon research outcomes. - Supervise or direct the work of other geneticists, biologists, technicians, or biometricians working on genetics research projects. - Evaluate genetic data by performing appropriate mathematical or statistical calculations and analyses. - Share research findings by writing scientific articles or by making presentations at scientific conferences - Review, approve, or interpret genetic laboratory results.

Outcome	Demonstrate critical thinking
Marketable Skills	- Identifying complex problems and reviewing related information to develop and evaluate options and implement solutions. - Considering the relative costs and benefits of potential actions to choose the most appropriate one. - Using logic and reasoning to identify the strengths and weaknesses of alternative solutions, conclusions or approaches to problems. - Observing, receiving, and otherwise obtaining information from all relevant sources. - Identifying the underlying principles, reasons, or facts of information by breaking down information or data into separate parts. - Analyzing information and evaluating results to choose the best solution and solve problems.

Outcome	Communicate effectively
Marketable Skills	• Knowledge of the structure and content of the English language including the meaning and spelling of words, rules of composition, and grammar. • Giving full attention to what other people are saying, taking time to understand the points being made, asking questions as appropriate, and not interrupting at inappropriate times. • Understanding written sentences and paragraphs in work related documents.

Outcome	Practice personal and social responsibility
Marketable Skills	• Monitoring/Assessing performance of yourself, other individuals, or organizations to make improvements or take corrective action. • Managing one's own time and the time of others.

Outcome	Demonstrate social, cultural, and global competencies
Marketable Skills	• Knowledge of principles and processes for providing customer and personal services. This includes customer needs assessment, meeting quality standards for services, and evaluation of customer satisfaction. • Being aware of others' reactions and understanding why they react as they do.

Outcome	Prepare to engage in life-long learning
Marketable Skills	• Understanding the implications of new information for both current and future problem-solving and decision-making. • Selecting and using training/instructional methods and procedures appropriate for the situation when learning or teaching new things.

Outcome	Work collaboratively
Marketable Skills	• Motivating, developing, and directing people as they work, identifying the best people for the job. • Bringing others together and trying to reconcile differences.

Notes:
- All marketable skills listed for this example program were drawn from the Knowledge, Skills, and Abilities identified by the US Department of Labor and Statistics for "genetics" as published on O*Net Online (onetonline.org)
- Alternate sources for degree-specific marketable skills include learning outcomes and associated metrics used for programmatic assessment
- Learning outcomes or skills required for programmatic accreditation