

Twice Born Ministry

BIO-101: General Biology I: Life and Image of God

Course Code: BIO-101

Credit Hours: 3

King James Version (KJV) — Sola Scriptura Curriculum

Generated 2026-07-02

Course Description

BIO-101: General Biology I: Life and Image of God

Course Description

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

This course is part of **Layer 4 — Career Tracks** (Track E: STEM / Mathematics / Sciences) in the Twice Born Ministry Bible School catalog. **College category:** Biology.

Course Details

| Field | Value |

|-----|-----|

| **Course Code** | BIO-101 |

| **Career Track** | E — STEM / Mathematics / Sciences |

| **Catalog Track** | General Biology |

| **College Category** | Biology |

| **Credit Hours** | 3 |

| **Weeks** | 12 |

| **Lessons** | 12 |

| **Prerequisites** | SCI-101 |

| **Homeschool Band** | College |

| **Primary Text** | King James Version (KJV) |

| **Source / Resources** | OpenStax Biology awareness; Genesis 1 |

TBM Cross-References

- Genesis 1:27 (KJV)

- • SCI-101
- • BIOTECH-101 prerequisite path

Learning Outcomes

Upon completion, students will be able to:

1. Explain core concepts and vocabulary for this vocational domain at college introductory level.

2. Apply biblical ethics when secular models conflict with Kingdom priorities.
3. Complete practical assignments, scenarios, or lab exercises with documented integrity.
4. Articulate connections between vocation, stewardship, and local church ministry.
5. Pass module quizzes and capstone assessments at 70% or higher.

Assessment Overview

- **Module quizzes:** JSON per module (multiple choice + short answer).
- **Assignments:** 3–4 rubric-graded projects.
- **Group projects:** 2 collaborative exercises.
- **Final exam:** Comprehensive short and extended responses.
- **Video scripts:** 3–5 instructor scripts for optional production.

Christian Guardrails

- KJV citation standard; Christ-centered instruction.
- Career exploration does not replace licensure, trade apprenticeships, or professional counsel where required.
- AI tools may assist research but not replace original work or pastoral judgment.

Instructor Notes

Professor Shepherd AI instructor shortcode: [tb_ai_instructor course_code="BIO-101"]

Twice Born Ministry Bible School — Layer 4 Career Tracks

Course Modules

BIO-101 — Lesson 1: Biology and the Doctrine of Creation

Introduction

Welcome to Lesson 1 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Biology and the Doctrine of Creation** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —" Dignity

So God created man in his own image (Genesis 1:27, KJV). Patients, employees, tenants, and citizens bear dignity that policies must protect.

Apply this principle while studying **Biology and the Doctrine of Creation**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Biology and the Doctrine of Creation

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Biology and the Doctrine of Creation should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 1: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Biology and the Doctrine of Creation** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 1 Summary: We examined **Biology and the Doctrine of Creation** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 2. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

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Ministry Case Study

Imagine a congregant confused about this lesson's topic after watching online teaching that contradicts historic evangelical doctrine. Draft a pastoral response email that (1) expresses empathy, (2) clarifies biblical teaching with two references, (3) invites in-person conversation, and (4) avoids condescension. Pastoral communication is part of theological training, not an optional soft skill.

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BIO-101 — Lesson 2: Scientific Method in Life Sciences

Introduction

Welcome to Lesson 2 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Scientific Method in Life Sciences** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

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Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —" Stewardship

The earth is the LORD's, and the fulness thereof (Psalm 24:1, KJV). Every vocation—"accounting, medicine, media, or cloud engineering—"is borrowed stewardship.

Apply this principle while studying **Scientific Method in Life Sciences**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Scientific Method in Life Sciences

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Scientific Method in Life Sciences should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 2: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Scientific Method in Life Sciences** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 2 Summary: We examined **Scientific Method in Life Sciences** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 3. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Ministry Case Study

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Supplemental Reading and Reflection

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Worship Integration

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BIO-101 — Lesson 3: Chemistry of Life and Macromolecules

Introduction

Welcome to Lesson 3 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Chemistry of Life and Macromolecules** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

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Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —” Wisdom

If any of you lack wisdom, let him ask of God (James 1:5, KJV). Markets, laws, and technologies change; Scripture-grounded wisdom endures.

Apply this principle while studying **Chemistry of Life and Macromolecules**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Chemistry of Life and Macromolecules

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
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Professional Standards

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TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Chemistry of Life and Macromolecules should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 3: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Chemistry of Life and Macromolecules** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 3 Summary: We examined **Chemistry of Life and Macromolecules** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 4. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

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Supplemental Reading and Reflection

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BIO-101 — Lesson 4: Cell Structure and Membrane Transport

Introduction

Welcome to Lesson 4 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Cell Structure and Membrane Transport** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —” Dignity

So God created man in his own image (Genesis 1:27, KJV). Patients, employees, tenants, and citizens bear dignity that policies must protect.

Apply this principle while studying **Cell Structure and Membrane Transport**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Cell Structure and Membrane Transport

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary

ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)

- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Cell Structure and Membrane Transport should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 4: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Cell Structure and Membrane Transport** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 4 Summary: We examined **Cell Structure and Membrane Transport** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 5. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Ministry Case Study

Imagine a congregant confused about this lesson's topic after watching online teaching that contradicts historic evangelical doctrine. Draft a pastoral response email that (1) expresses empathy, (2) clarifies biblical teaching with two references, (3) invites in-person conversation, and (4) avoids condescension. Pastoral communication is part of theological training, not an optional soft skill.

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

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Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

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Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

Ministry Case Study

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Historical Figure Spotlight

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Historical Figure Spotlight

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Worship Integration

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BIO-101 — Lesson 5: Energy and Metabolism: Photosynthesis and Respiration

Introduction

Welcome to Lesson 5 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Energy and Metabolism: Photosynthesis and Respiration** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —" Stewardship

The earth is the LORD's, and the fulness thereof (Psalm 24:1, KJV). Every vocation—"accounting, medicine, media, or cloud engineering—"is borrowed stewardship.

Apply this principle while studying **Energy and Metabolism: Photosynthesis and Respiration**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Energy and Metabolism: Photosynthesis and Respiration

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Energy and Metabolism: Photosynthesis and Respiration should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 5: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Energy and Metabolism: Photosynthesis and Respiration** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 5 Summary: We examined **Energy and Metabolism: Photosynthesis and Respiration** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 6. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

Worship Integration

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Ministry Case Study

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Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

Historical Figure Spotlight

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BIO-101 — Lesson 6: Cell Division and Mitosis

Introduction

Welcome to Lesson 6 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Cell Division and Mitosis** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —” Wisdom

If any of you lack wisdom, let him ask of God (James 1:5, KJV). Markets, laws, and technologies change; Scripture-grounded wisdom endures.

Apply this principle while studying **Cell Division and Mitosis**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Cell Division and Mitosis

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
 - • SCI-101
 - • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Cell Division and Mitosis should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 6: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Cell Division and Mitosis** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 6 Summary: We examined **Cell Division and Mitosis** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 7. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

Ministry Case Study

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Worship Integration

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Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

Historical Figure Spotlight

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BIO-101 — Lesson 7: Genetics: Mendel and DNA Intro

Introduction

Welcome to Lesson 7 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Genetics: Mendel and DNA Intro** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —" Dignity

So God created man in his own image (Genesis 1:27, KJV). Patients, employees, tenants, and citizens bear dignity that policies must protect.

Apply this principle while studying **Genetics: Mendel and DNA Intro**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Genetics: Mendel and DNA Intro

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
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Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Genetics: Mendel and DNA Intro should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 7: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Genetics: Mendel and DNA Intro** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 7 Summary: We examined **Genetics: Mendel and DNA Intro** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 8. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Ministry Case Study

Imagine a congregant confused about this lesson's topic after watching online teaching that contradicts historic evangelical doctrine. Draft a pastoral response email that (1) expresses empathy, (2) clarifies biblical teaching with two references, (3) invites in-person conversation, and (4) avoids condescension. Pastoral communication is part of theological training, not an optional soft skill.

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

Supplemental Reading and Reflection

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Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

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Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

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Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

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Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

BIO-101 — Lesson 8: Evolution Claims vs. Design Inference (Charitable Framework)

Introduction

Welcome to Lesson 8 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Evolution Claims vs. Design Inference (Charitable Framework)** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —” Stewardship

The earth is the LORD's, and the fulness thereof (Psalm 24:1, KJV). Every vocation—”accounting, medicine, media, or cloud engineering—”is borrowed stewardship.

Apply this principle while studying **Evolution Claims vs. Design Inference (Charitable Framework)**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Evolution Claims vs. Design Inference (Charitable Framework)

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Evolution Claims vs. Design Inference (Charitable Framework) should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 8: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Evolution Claims vs. Design Inference (Charitable Framework)** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 8 Summary: We examined **Evolution Claims vs. Design Inference (Charitable Framework)** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 9. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

Ministry Case Study

Imagine a congregant confused about this lesson's topic after watching online teaching that contradicts historic evangelical doctrine. Draft a pastoral response email that (1) expresses empathy, (2) clarifies biblical teaching with two references, (3) invites in-person conversation, and (4) avoids condescension. Pastoral communication is part of theological training, not an optional soft skill.

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Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

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Supplemental Reading and Reflection

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Historical Figure Spotlight

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Worship Integration

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Historical Figure Spotlight

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BIO-101 — Lesson 9: Ecology, Populations, and Stewardship

Introduction

Welcome to Lesson 9 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Ecology, Populations, and Stewardship** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —” Wisdom

If any of you lack wisdom, let him ask of God (James 1:5, KJV). Markets, laws, and technologies change; Scripture-grounded wisdom endures.

Apply this principle while studying **Ecology, Populations, and Stewardship**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Ecology, Populations, and Stewardship

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101

- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Ecology, Populations, and Stewardship should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 9: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Ecology, Populations, and Stewardship** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 9 Summary: We examined **Ecology, Populations, and Stewardship** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 10. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

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Ministry Case Study

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Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

Historical Figure Spotlight

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Worship Integration

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Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

BIO-101 — Lesson 10: Human Body Systems Overview

Introduction

Welcome to Lesson 10 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Human Body Systems Overview** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —" Dignity

So God created man in his own image (Genesis 1:27, KJV). Patients, employees, tenants, and citizens bear dignity that policies must protect.

Apply this principle while studying **Human Body Systems Overview**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Human Body Systems Overview

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Human Body Systems Overview should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 10: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Human Body Systems Overview** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 10 Summary: We examined **Human Body Systems Overview** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 11. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Ministry Case Study

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Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word.

Write a half-page response connecting supplemental reading to this lesson's theme.

Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

Ministry Case Study

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Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

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Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

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BIO-101 — Lesson 11: Bioethics at Life's Beginning

Introduction

Welcome to Lesson 11 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Bioethics at Life's Beginning** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —" Stewardship

The earth is the LORD's, and the fulness thereof (Psalm 24:1, KJV). Every vocation—"accounting, medicine, media, or cloud engineering—"is borrowed stewardship.

Apply this principle while studying **Bioethics at Life's Beginning**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Bioethics at Life's Beginning

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)

- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Bioethics at Life's Beginning should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 11: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Bioethics at Life's Beginning** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 11 Summary: We examined **Bioethics at Life's Beginning** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to Lesson 12. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Ministry Case Study

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Supplemental Reading and Reflection

Assign one chapter from a standard systematic theology textbook or equivalent lecture notes. Summarize the author's definitions, note where Scripture proofs appear, and evaluate whether the Bible truly supports each claim. Theology students must read widely yet judge all teaching by the Word. Write a half-page response connecting supplemental reading to this lesson's theme.

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Worship Integration

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Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their courage and Scripture saturation, not necessarily every cultural application.

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BIO-101 — Lesson 12: Capstone: Biology Field Journal with KJV Integration

Introduction

Welcome to Lesson 12 of **General Biology I: Life and Image of God** (BIO-101). This session explores **Capstone: Biology Field Journal with KJV Integration** within the **Track E — STEM / Mathematics / Sciences** pathway at Twice Born Ministry Bible School.

This track provides Liberty/Hillsdale-style quantitative and natural science foundations with creation-stewardship framing—not scientism, but rigorous inquiry under God.

This is **Layer 4 — Career Tracks** content at college level (or high school dual-enrollment where noted). The King James Version remains the citation standard for all scripture. Complete BS-FND-100 or listed prerequisites before advanced modules.

Pray for wisdom before studying. Career competence without Christ-centered character produces skilled workers who build on sand. We pursue excellence **as unto the Lord** (Colossians 3:23).

Christian Ethics Integration —" Wisdom

If any of you lack wisdom, let him ask of God (James 1:5, KJV). Markets, laws, and technologies change; Scripture-grounded wisdom endures.

Apply this principle while studying **Capstone: Biology Field Journal with KJV Integration**: document ethical decisions, cite KJV where appropriate, and identify when professional practice must yield to conscience.

Core Teaching

Theme: Capstone: Biology Field Journal with KJV Integration

The fear of the LORD is the beginning of wisdom: and the knowledge of the holy is understanding (Proverbs 9:10, KJV). Mathematics and natural science reveal order in creation without displacing the Creator.

Through faith we understand that the worlds were framed by the word of God (Hebrews 11:3, KJV). Scientific inquiry honors God when conducted with humility, honesty, and stewardship.

Practical Focus

Cell structure, genetics intro, ecology, and human biology with dignity-of-life ethics before applied biotech.

Competency targets for this lesson:

- Define key terms and industry-standard vocabulary at introductory level.
- Identify biblical principles that govern ethical decisions in this domain.
- Complete hands-on or scenario-based exercises in assignments and quizzes.
- Connect vocational skills to local church ministry or community service where applicable.

Professional Standards

Career track courses prepare students for further education, certification programs, or bi-vocational ministry—they do not replace licensure, trade union apprenticeships, CPA/legal counsel, or seminary ordination tracks unless explicitly stated in prerequisites.

TBM & Catalog Cross-References

- Genesis 1:27 (KJV)
- • SCI-101
- • BIOTECH-101 prerequisite path

Application for Vocation and Ministry

Capstone: Biology Field Journal with KJV Integration should change how you work, lead, serve customers, and witness.

Pastoral practice: Draft a ministry response, visit plan, or counseling scenario tied to this lesson. Discuss with mentor or elder board member.

Personal devotion: Write a brief prayer connecting today's vocational theme to Christ's lordship over your schedule, income, and relationships.

Local church: Share one insight with your pastor, deacon team, or small group—especially where bi-vocational ministry applies.

Evangelism: Prepare a 60-second testimony linking honest work or digital stewardship to the gospel hope you profess.

Lab, Scenario, or Field Exercise

Exercise 12: Role-play a pastoral visit, counseling intake, or board meeting scenario. Debrief using scripture and ethics checklists.

Document assumptions, resources consulted, and limitations. Submit via LMS with honor statement. Supervised field hours may count toward capstone portfolios where approved by cohort facilitator.

Discussion Questions

How does **Capstone: Biology Field Journal with KJV Integration** align with Colossians 3:23 ("as to the Lord")?

What secular practice in this field most often conflicts with biblical ethics?

Which prerequisite course or TBM resource best supports this lesson?

How would you teach this topic to a high school dual-enrollment student?

What is one measurable action you will take this week based on this lesson?

Summary and Next Steps

Lesson 12 Summary: We examined **Capstone: Biology Field Journal with KJV Integration** through scripture, vocational standards, and ministry application.

Action item: Complete the module quiz (70% to pass) and begin assignment work if due this week.

Preview: Continue to the capstone module. Review SPECIALIZATION_SOURCES.md or Kingdom Capital / TBM Marketing docs as listed in your syllabus.

Soli Deo gloria — whether ye eat or drink, or whatsoever ye do, do all to the glory of God (1 Corinthians 10:31).

Historical Figure Spotlight

Research one defender of orthodoxy related to this doctrine—Augustine, Athanasius, Luther, Calvin, Spurgeon, or a modern missionary martyr. Write 150 words on how their context shaped their emphasis. Standing on their shoulders, we inherit confessions forged in controversy. Imitate their

courage and Scripture saturation, not necessarily every cultural application.

Worship Integration

Select a hymn or worship song rich in biblical doctrine (e.g., "Holy, Holy, Holy," "And Can It Be," "A Mighty Fortress"). Analyze its lyrics for theological accuracy in light of this lesson. Lead family worship using that hymn, reading one supporting passage before singing. Theology should enliven corporate praise, not remain abstract.

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Appendix A — Assignments

Week 01

Week 01 Assignment — Reflection Journal

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 1: Biology and the Doctrine of Creation

Learning objective (Bloom's taxonomy)

Students will **analyze** course content from **BIO-101 — Lesson 1: Biology and the Doctrine of Creation** with KJV integration and measurable evidence in the submission.

Task

Analyze: Write a 300–500 word reflection on **BIO-101 — Lesson 1: Biology and the Doctrine of Creation**. Include at least two KJV citations and one personal application.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Biology, Doctrine

Week 02

Week 02 Assignment — Memory Verse Application

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 2: Scientific Method in Life Sciences

Learning objective (Bloom's taxonomy)

Students will **apply** course content from **BIO-101 — Lesson 2: Scientific Method in Life Sciences** with KJV integration and measurable evidence in the submission.

Task

Apply: Recite this week's memory verse from memory, then write 250 words explaining how it applies to daily discipleship.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Scientific, Method

Week 03

Week 03 Assignment — Expository Outline

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 3: Chemistry of Life and Macromolecules

Learning objective (Bloom's taxonomy)

Students will **outline** course content from **BIO-101 — Lesson 3: Chemistry of Life and Macromolecules** with KJV integration and measurable evidence in the submission.

Task

Outline: Produce a structured outline (400+ words) for the main passage in **BIO-101 — Lesson 3: Chemistry of Life and Macromolecules**. Include pericope titles and one-sentence themes.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Chemistry, Macromolecules

Week 04

Week 04 Assignment — Discussion Response

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 4: Cell Structure and Membrane Transport

Learning objective (Bloom's taxonomy)

Students will **explain** course content from **BIO-101 — Lesson 4: Cell Structure and Membrane Transport** with KJV integration and measurable evidence in the submission.

Task

Explain: Answer two discussion prompts from the Week 4 reading in 200 words each. Cite KJV only.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Structure, Membrane

Week 05

Week 05 Assignment — Practical Ministry Step

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 5: Energy and Metabolism: Photosynthesis and Respiration

Learning objective (Bloom's taxonomy)

Students will **demonstrate** course content from **BIO-101 — Lesson 5: Energy and Metabolism: Photosynthesis and Respiration** with KJV integration and measurable evidence in the submission.

Task

Demonstrate: Complete one practical ministry action tied to **BIO-101 — Lesson 5: Energy and Metabolism: Photosynthesis and Respiration** (visit, prayer walk, family worship, or service). Submit a 200-word report plus optional photo upload.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Manual review (practical/upload).

Pass: 70%

Rubric (100 points)

Week 06

Week 06 Assignment — Witness Outline

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 6: Cell Division and Mitosis

Learning objective (Bloom's taxonomy)

Students will **construct** course content from **BIO-101 — Lesson 6: Cell Division and Mitosis** with KJV integration and measurable evidence in the submission.

Task

Construct: Draft a 3-minute spoken witness outline using this week's theme. Include gospel bridge, one objection with biblical answer, and call to faith.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Division, Mitosis

Week 07

Week 07 Assignment — Cross-Reference Study

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 7: Genetics: Mendel and DNA Intro

Learning objective (Bloom's taxonomy)

Students will **compare** course content from **BIO-101 — Lesson 7: Genetics: Mendel and DNA Intro** with KJV integration and measurable evidence in the submission.

Task

Compare: Find three cross-references that illuminate **BIO-101 — Lesson 7: Genetics: Mendel and DNA Intro**. Write 400 words comparing themes (OT + NT).

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Genetics, Mendel

Week 08

Week 08 Assignment — Historical Context Brief

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 8: Evolution Claims vs. Design Inference (Charitable Framework)

Learning objective (Bloom's taxonomy)

Students will **describe** course content from **BIO-101 — Lesson 8: Evolution Claims vs. Design Inference (Charitable Framework)** with KJV integration and measurable evidence in the submission.

Task

Describe: Write 350 words on historical/literary context for **BIO-101 — Lesson 8: Evolution Claims vs. Design Inference (Charitable Framework)**. Minimum four KJV citations.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Evolution, Claims

Week 09

Week 09 Assignment — Christological Connection Essay

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 9: Ecology, Populations, and Stewardship

Learning objective (Bloom's taxonomy)

Students will **evaluate** course content from **BIO-101 — Lesson 9: Ecology, Populations, and Stewardship** with KJV integration and measurable evidence in the submission.

Task

Evaluate: Explain how **BIO-101 — Lesson 9: Ecology, Populations, and Stewardship** points to Christ in 400–600 words. Use literal-grammatical-historical method.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Ecology, Populations

Week 10

Week 10 Assignment — Teaching Prep

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 10: Human Body Systems Overview

Learning objective (Bloom's taxonomy)

Students will **design** course content from **BIO-101 — Lesson 10: Human Body Systems Overview** with KJV integration and measurable evidence in the submission.

Task

Design: Prepare a 5-minute teaching outline for **BIO-101 — Lesson 10: Human Body Systems Overview** suitable for a small group or homeschool lesson.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Human, Systems

Week 11

Week 11 Assignment — Integration & Review

Course: BIO-101 · Life and Image of God

Week focus: BIO-101 — Lesson 12: Capstone: Biology Field Journal with KJV Integration

Learning objective (Bloom's taxonomy)

Students will **synthesize** course content from **BIO-101 — Lesson 12: Capstone: Biology Field Journal with KJV Integration** with KJV integration and measurable evidence in the submission.

Task

Synthesize: Synthesize the top five themes from Life and Image of God. 600 words, minimum six KJV citations, one paragraph on personal growth.

Submit: Text via LMS assignment form. PDF upload optional for longer work.

Grading

Grading mode: Auto-grade eligible (written text).

Pass: 70%

Rubric (100 points)

Auto-grade hints

Keywords for automated pre-check: KJV, Christ, Scripture, God, Lesson, Capstone, Biology

Week 12

Learning objective (Bloom's taxonomy)

Students will **create** an original ministry artifact synthesizing Life and Image of God with KJV fidelity and scholarship-gallery quality.

Creative Ministry Project —” BIO-101

Course: General Biology I: Life and Image of God

Integrate professional skills from this course with gospel witness. Submit a capstone artifact (report, demo, script, or plan) with KJV integration and rubric self-assessment. Minimum 70% to pass; 75% for excellence distinction.

Grading

Grading mode: Manual review (creative upload).

Pass: 70%

Rubric (100 points)

Creative Ministry Project

Creative Ministry Project —” BIO-101

Course: General Biology I: Life and Image of God

Integrate professional skills from this course with gospel witness. Submit a capstone artifact (report, demo, script, or plan) with KJV integration and rubric self-assessment. Minimum 70% to pass; 75% for excellence distinction.

Appendix B — Key Terms & Passages

- • Theme: Capstone: Biology Field Journal with KJV Integration