# SPATIAL ANALYSIS FOR HEALTH SCIENCES (M.S.) - GEOGRAPHIC INFORMATION SYSTEMS

**Important:** This degree plan is effective for those starting this degree program in fall 2025 through summer 2026. This degree plan will remain in effect for students who do not break enrollment or who do not change degree programs, concentrations, or cognates.

| Code | Title | Hours |
|---|---|---|
| **Program Courses** | | |
| HLTH 501 | Biostatistics | 3 |
| or STAT 501 | Statistical Computing | |
| HLTH 503 | Principles of Epidemiology | 3 |
| HLTH 505 | Principles of Environmental Health | 3 |
| HLTH 652 | Data Visualization and Spatial Analysis | 3 |
| HLTH 653 | Global Health Epidemiology | 3 |
| STAT 545 | Exploratory Data Analysis | 3 |
| Global Health Elective [1] | | 3 |
| Global Health Elective [1] | | 3 |
| **Total Hours** | | **24** |

[1] Choose from one of the following courses: GEOG 650, HLTH 620, HLTH 622, HLTH 623, HLTH 624, HLTH 625, HLTH 626, HLTH 642, HLTH 652, HLTH 660, HLTH 661, or HLTH 663.

| Code | Title | Hours |
|---|---|---|
| **Geographic Information Systems Concentration** | | |
| GEOG 502 | Introduction to Geographic Information Systems (GIS) | 3 |
| GEOG 503 | Cartography and Geographic Visualization | 3 |
| GEOG 506 | Spatial Statistics | 3 |
| GEOG 507 | Analysis and Modeling | 3 |
| GEOG 643 | GIS for Environmental Sciences | 3 |
| HLTH 654 | GIS Applications for Global Health | 3 |
| **Total Hours** | | **18** |

*All applicable prerequisites must be met*

## Graduation Requirements

- Complete 42 hours
- A maximum of 50% of the program hours may be transferred if approved and allowable, including credit from an earned degree from Liberty University on the same academic level
- 3.0 GPA
- No more than two grades of C may be applied to the degree (includes grades of C+ & C-)
- No grade of D or below may be applied to the degree (includes grades of D+ & D-)
- Degree must be completed within 5 years
- Submission of Degree Completion Application must be completed within the last semester of a student's anticipated graduation date

### Program Offered in Online Format

## Course Sequence

| | | |
|---|---|---|
| **First Year** | | |
| **First Semester** | | **Hours** |
| HLTH 501 | Biostatistics | 3 |
| or STAT 501 | or Statistical Computing | |
| GEOG 502 | Introduction to Geographic Information Systems (GIS) | 3 |
| HLTH 503 | Principles of Epidemiology | 3 |
| | **Hours** | **9** |
| **Second Semester** | | |
| HLTH 505 | Principles of Environmental Health | 3 |
| HLTH 652 | Data Visualization and Spatial Analysis | 3 |
| GEOG 503 | Cartography and Geographic Visualization | 3 |
| | **Hours** | **9** |
| **Second Year** | | |
| **Third Semester** | | |
| GEOG 506 | Spatial Statistics | 3 |
| STAT 545 | Exploratory Data Analysis | 3 |
| GEOG 507 | Analysis and Modeling | 3 |
| | **Hours** | **9** |
| **Fourth Semester** | | |
| Global Health Elective [1] | | 3 |
| Global Health Elective [1] | | 3 |
| GEOG 643 | GIS for Environmental Sciences | 3 |
| | **Hours** | **9** |
| **Third Year** | | |
| **Fifth Semester** | | |
| HLTH 653 | Global Health Epidemiology | 3 |
| HLTH 654 | GIS Applications for Global Health | 3 |
| | **Hours** | **6** |
| | **Total Hours** | **42** |

[1] Choose from one of the following courses: GEOG 650, HLTH 620, HLTH 622, HLTH 623, HLTH 624, HLTH 625, HLTH 626, HLTH 642, HLTH 652, HLTH 660, HLTH 661, or HLTH 663.