Note:

Course content may be changed, term to term, without notice. The information below is provided as a guide for course selection and is not binding in any form, and should not be used to purchase course materials.
COURSE SYLLABUS

EDUC 635
TEACHING SCIENCE IN THE MIDDLE SCHOOL

COURSE DESCRIPTION
Contemporary methods and research for teaching science to middle school students.

RATIONALE
This course is designed to help middle school teachers improve the skills necessary to effectively teach science in a God-centered manner.

I. PREREQUISITE
For information regarding prerequisites for this course, please refer to the Academic Course Catalog.

II. REQUIRED RESOURCE PURCHASE
Click on the following link to view the required resource(s) for the term in which you are registered: http://bookstore.mbsdirect.net/liberty.htm

III. ADDITIONAL MATERIALS FOR LEARNING
A. Computer with basic audio/video output equipment
B. Internet access (broadband recommended)
C. Microsoft Office

IV. MEASURABLE LEARNING OUTCOMES
Upon successful completion of this course, the student will be able to:
A. Analyze the major concepts in life, physical, and earth science.
B. Use developmentally appropriate strategies to design and deliver instruction in science.
C. Discuss methods to provide active inquiry experiences in the teaching of science by using various questioning skills and developing science process skills.
D. Design a unit that will focus on diverse students which will promote their engagement in the schooling process, especially science and mathematics.
E. Evaluate important areas of educational policy issues and professional development from a biblical perspective.

V. COURSE REQUIREMENTS AND ASSIGNMENTS
A. Textbook readings and lecture presentations/notes

B. Course Requirements Checklist

After reading the Course Syllabus and Student Expectations, the student will complete the related checklist found in Module/Week 1.

C. Discussion Board Forums (8)

Discussion Boards are collaborative learning experiences. Therefore, the candidate will complete 8 Discussion Board Forums in this course. The response to the discussion board question posed must contain at least 200 words and be posted in a new thread of the corresponding forum. Candidates must reply with at least 150 words each to 3 classmates’ threads.

D. Assigned Topics from the Chapters of the e-Book

The candidate will prepare a 1-page typed report for each of the 2 chapter assigned topics, including a 1-paragraph summary and a 1-paragraph reaction or analysis. An APA title page and reference page and a proper citation of the article used for each review must be included. The topic reviews must be submitted via SafeAssign.

E. Electronic Science Portfolio

Using the provided template, the candidate will develop and submit an Electronic Science Portfolio consisting of at least 50 links, with 10 in each of the 5 subgroups. An APA title page and bibliography must be included, with a minimum of 5 sources. This assignment must be submitted via SafeAssign.

F. Chapter Assignments (2)

The candidate will read the assigned chapters and submit a detailed summary of the chapter assignments completed. There is no need to type out the questions. All Chapter Assignments will be submitted in a single Microsoft Word document.

G. Science Experiment

The candidate will conduct a science experiment in 2 steps throughout this course:

1. Science Experiment: Proposal

   The candidate will complete the first few steps of the Science Experiment including the problem/question, prior knowledge/research, prediction/hypothesis, and plan/procedure.

2. Science Experiment: Final

   The candidate will complete an experiment by submitting data collection, data analysis, and inference/conclusion in addition to the Science Experiment: Proposal. The Science Experiment: Final will be a total of 5–7 pages (excluding the title page and reference page).

H. Electronic Vocabulary Notebook
The candidate will complete an electronic vocabulary notebook throughout the course. Each defined word will have the definition and a simple but impacting visual of that definition. A provided template will be used to compile a notebook of at least 30 unfamiliar science vocabulary words and definitions.

I. Integrated Unit

The candidate will create 5 extensive and complete lesson plans for a science unit. Each lesson plan will be based on the 5 E’s Learning Cycle and composed using the Lesson Plan Template.

VI. Course Grading and Policies

A. Points

<table>
<thead>
<tr>
<th>Requirement</th>
<th>Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Course Requirements Checklist</td>
<td>10</td>
</tr>
<tr>
<td>Discussion Board Forums (8 at 25 pts ea)</td>
<td>200</td>
</tr>
<tr>
<td>Chapter Text Topic (2 at 50 pts ea)</td>
<td>100</td>
</tr>
<tr>
<td>Electronic Science Portfolio</td>
<td>100</td>
</tr>
<tr>
<td>Chapter Assignments (2 at 100 pts ea)</td>
<td>200</td>
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<tr>
<td>Science Experiment</td>
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<tr>
<td>Science Experiment: Proposal</td>
<td>50</td>
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<tr>
<td>Science Experiment: Final</td>
<td>100</td>
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<tr>
<td>Electronic Vocabulary Notebook</td>
<td>100</td>
</tr>
<tr>
<td>Integrated Unit</td>
<td>150</td>
</tr>
</tbody>
</table>

**Total** 1010

B. Scale

D- = 730–749  F = 0–729

C. LiveText Submission Policy

All LiveText assignments—including those submitted in Blackboard and/or via SafeAssign—must be submitted to LiveText in order for the student to receive credit for them.

D. Late Assignment Policy

If the student is unable to complete an assignment on time, then he or she must contact the instructor immediately by email.

Assignments that are submitted after the due date without prior approval from the instructor will receive the following deductions:

1. Late assignments submitted within one week of the due date will receive a 10% deduction.
2. Assignments submitted more than one week late will receive a 20% deduction.
3. Assignments submitted two weeks late or after the final date of the course will not be accepted.

4. Late Discussion Board threads or replies will not be accepted.

Special circumstances (e.g., death in the family, personal health issues) will be reviewed by the instructor on a case-by-case basis.

D. Disability Assistance

Students with a documented disability may contact Liberty University Online’s Office of Disability Academic Support (ODAS) at LUOODAS@liberty.edu to make arrangements for academic accommodations. Further information can be found at www.liberty.edu/disabilitysupport.
## COURSE SCHEDULE

**EDUC 635**


<table>
<thead>
<tr>
<th>MODULE/WEEK</th>
<th>READING &amp; STUDY</th>
<th>ASSIGNMENTS</th>
<th>POINTS</th>
</tr>
</thead>
</table>
| 1           | Chiappetta & Koballa: chs. 1–2 4 presentations | Course Requirements Checklist  
MAT/MED Advising Guide  
Quiz  
DB Forum 1  
Chapter Assigned Topics 1 | 10  
0  
0  
25  
50 |
| 2           | Chiappetta & Koballa: chs. 3, 5 4 presentations | DB Forum 2  
Science Experiment: Proposal | 25  
50 |
| 3           | Chiappetta & Koballa: chs. 4, 6 4 presentations | DB Forum 3  
Chapter Assigned Topics 2 | 25  
50 |
| 4           | Chiappetta & Koballa: chs. 7, 9 10 presentations | DB Forum 4  
Electronic Science Portfolio | 25  
100 |
| 5           | Chiappetta & Koballa: chs. 8, 10 4 presentations | DB Forum 5  
Chapter Review Assignments 1 | 25  
100 |
| 6           | Chiappetta & Koballa: chs. 11–12 4 presentations | DB Forum 6  
Science Experiment: Final | 25  
100 |
| 7           | Chiappetta & Koballa: chs. 13–14 7 presentations | DB Forum 7  
Electronic Vocabulary Notebook | 25  
100 |
| 8           | Chiappetta & Koballa: ch. 15 1 presentation | DB Forum 8  
Chapter Review Assignments 2  
Integrated Unit | 25  
100  
150 |

**TOTAL** 1010

DB = Discussion Board

**NOTE:** Each course module/week begins on Monday morning at 12:00 a.m. (ET) and ends on Sunday night at 11:59 p.m. (ET). The final week ends at 11:59 p.m. (ET) on **Friday**.