# PREFACE

# PART I: SOUND PREPARATIONS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>INSTRUCTIONAL SUPPORT SERVICES AND RESOURCES</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>UNDERSTANDING YOUR STUDENTS</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>YOUR UNDERGRADUATE STUDENT BODY PROFILE</td>
<td></td>
</tr>
<tr>
<td></td>
<td>HOW PEOPLE LEARN</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THE ADULT LEARNER</td>
<td></td>
</tr>
<tr>
<td></td>
<td>INCLUSIVE INSTRUCTING</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THE COGNITIVE DEVELOPMENT OF UNDERGRADUATES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>ENCOURAGING COGNITIVE GROWTH</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>IN THE BEGINNING: COURSE DESIGN</td>
<td>17</td>
</tr>
<tr>
<td></td>
<td>BY OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WHY COURSE DESIGN BY OBJECTIVES?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WHAT IS AN OBJECTIVE?</td>
<td></td>
</tr>
<tr>
<td></td>
<td>BEFORE WRITING LEARNING OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>WRITING LEARNING OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>TYPES OF LEARNING OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>A COGNITIVE HIERARCHY OF OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COURSE DESIGN BY OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td></td>
<td>COURSE DEVELOPMENT BY OBJECTIVES</td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>THE COMPLETE SYLLABUS</td>
<td>27</td>
</tr>
<tr>
<td></td>
<td>APPROPRIATE SYLLABUS ITEMS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GRAPHICS TO APPEND FOR CLARITY</td>
<td></td>
</tr>
<tr>
<td></td>
<td>THE “LEARNING-CENTERED SYLLABUS”</td>
<td></td>
</tr>
<tr>
<td></td>
<td>GETTING STUDENTS TO READ YOUR SYLLABUS</td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>COURSE COORDINATION BETWEEN FAcULTY AND TAs</td>
<td>35</td>
</tr>
<tr>
<td></td>
<td>BEFORE THE TERM: COURSE REVIEW AND ROLE SPECIFICATIONS</td>
<td></td>
</tr>
<tr>
<td></td>
<td>DURING THE TERM: REGULAR MEETINGS AND TEACHING FEEDBACK</td>
<td></td>
</tr>
<tr>
<td></td>
<td>EXTENDING MANAGING TO MENTORING</td>
<td></td>
</tr>
</tbody>
</table>
6 Copyright Guidelines for Instructors
Free Use: Fair Use, Facts, and Public Domain
Copying Print Media
Copying and Recording Music
Videotaping Broadcast Programming
Multimedia and the Internet
Permissions to Reprint and Licenses
Common Copyright Misconceptions
How Copyright Violations Are Actually Handled

PART II: GOOD BEGINNINGS

7 Your First Day of Class
First Impressions
Exchanging Information
Social Icebreakers: "Getting to Know You"
Subject-Matter Icebreakers
Drawing Class to a Close

8 Preventing and Responding to Classroom Incivility
What Is Incivility?
Why the Increase?
Preventing Incivility: Balancing Authority and Approachability
Preventing Incivility: Setting Ground Rules
Preventing Incivility: Modeling Correct Behavior
Preventing Incivility: Commanding Class Attention
Responding to Incivility
Seek Assistance

9 Preserving Academic Honesty
How Prevalent Is Cheating?
Who Cheats and Why?
Detecting Cheating
Preventing Cheating
Honor Codes

10 Making the Most of Office Hours
Getting Students to See You
Making the Time Productive
Student-Active Tutoring
Students in Academic or Emotional Trouble
11 Motivating Your Students 73
Extrinsic and Intrinsic Motivators
Strategies for Motivating Students
Equity in the Classroom

Part III: Varieties of Learning
and Teaching Strategies 77

12 Teaching to Different Learning Styles 79
Kolb’s Cycle of Learning Modes
Kolb’s Derived Learning Styles
Teaching to Kolb’s Types
Fleming and Mills’ Sensory-Based Learning Style Typology
Krause’s Cognitive Profile Model
Parallels Across Models
Multi-Sensory, Multi-Method Teaching: Most Effective for All

13 An Introduction to Student-Active Teaching: The Discovery Method 87
Recreating Historical Discoveries
Discovering Naive Misconceptions
Discovering Our Ignorance
Discovering Alternative Explanations
Discovery by the Socratic Method
Discovery in Other Student-Active Formats
The Key to Discovery

14 Making the Lecture a Learning Experience 93
The Effectiveness of Lecture: Learning, Motivation, and the Lecturer
The Effectiveness of Lecture: Time and Attention Spans
To Lecture or Not to Lecture?
Preparing an Effective Lecture
Options for Student-Active Breaks
Helping Students Take Notes
29 Lecture Note-Taking Tips for Students

15 Leading Effective Discussions 105
The Times for Discussion
A Discussion Primer: Starting Out
Improving Participation through Skillful Discussion Management
16 Questioning Techniques for Discussion and Assessment

**Questioning as a Process of Inquiry**
- Types of Well Constructed Questions
- Types of Poorly Constructed Questions
- Turning the Tables

17 Experiential Learning Activities

**Student Presentation Formats**
- Role Playing
- Simulations and Games
- Service Learning (SL): The Real Thing

18 Learning in Groups

**Cooperative vs. Collaborative vs. Team Learning**
- The Case for Cooperative Learning
- Changing Methods, Changing Roles
- Crucial Elements of Cooperative Learning
- Management Tips
- Tried and True Cooperative Learning Strategies
- Preparing Students for Life

19 Getting Your Students to Do the Readings

**Why Students Don’t Do the Readings**
- Inducing Students to Read
- Specific Tools for Holding Students Accountable
- Managing Your Workload

20 Writing-to-Learn Activities and Assignments

**Free Writes**
- The One-Minute Paper
- Journals
- One-Sentence Summaries
- Learning Logs
- Dialectical Notes
- Directed Paraphrasing
- Letters Home
- Other Letters, Memos, Notes, and Electronic Posts
- Mock Tests
- Drafts for Peer Feedback
- Multiple Purposes
21 Teaching Your Students to Think and Write

IN THE DISCIPLINES
CROSSDISCIPLINARY COMMONALITIES
Teaching Critical Thinking Through the Discipline's
METACOGNITIVE MODEL
METACOGNITIVE DIFFERENCES AMONG DISCIPLINES
MAKING STUDENTS BETTER THINKERS AND WRITERS
Teaching Students to Write for Their Futures
The Many Worlds of Writing

22 Tools of the Trade: Making the Most of

INSTRUCTIONAL AIDS AND TECHNOLOGY
THE UBQUITOUS BOARD
THE FLIP CHART
THE OVERHEAD PROJECTOR
THE SLIDE PROJECTOR
WHEN TO CONSIDER HIGH-TECH ALTERNATIVES
PRESENTATION SOFTWARE
Course Management Software
Electronic Discussion and Collaboration
Web-based Courses and Resources
INSTRUCTIONAL SOFTWARE
USING LAPTOPS IN THE CLASSROOM
LOOKING AHEAD

PART IV: Teaching Problem Solving

FOR TODAY’S WORLD

23 Teaching Problem Solving I:

THE CASE METHOD
THE EFFECTIVENESS OF THE CASE METHOD
THE APPROPRIATE SUBJECT MATTER
WHAT MAKES A GOOD CASE
EXTENDED CASES
DEBRIEFING CASES
A POSTSCRIPT FOR PIONEERS

4 Teaching Problem Solving II:

PROBLEM-BASED LEARNING
WHAT PBL IS AND HOW IT WORKS
PBL’S EFFECTIVENESS
WHAT STUDENTS THINK
GOOD PBL PROBLEMS AND WHERE TO FIND THEM
KUDOS FOR CREATIVITY
25 Teaching Problem Solving III: Quantitative Reasoning
The Problem with Most Problems
A Systematic Approach to Teaching Problem Solving
An Effective, Innovative Teaching Strategy:
   Cooperative Groups Solving Real Problems
Identifying and Correcting Problem Solving Pitfalls
Making Traditional Settings Accommodate These Teaching Methods

26 Teaching Problem Solving IV: Science in the Laboratory
Where Science Education Falls Short
Making the Lab a Meaningful Learning Experience
The Essentials of Lab Safety and Management
The Importance of Science Education

Part V: Assessment/Measuring Outcomes

27 Assessing Students’ Learning in Progress
Four-Dimensional Assessment
Characteristics of Classroom Assessment Techniques
Getting Started with Classroom Assessment
Some Tried and True CATs
Student Portfolios
Extending Classroom Assessment to Classroom Research
   and the Scholarship of Teaching

28 Test Construction
Thinking about Testing
General Testing Guidelines
Types of Test Questions
Composing Test Questions: Multiple Choice,
   True/False, Matching, Completion
   (Fill-in-the-Blank), Short Answer, Essay
Tests: The Ultimate Teaching Evaluation

29 Preparing Students for Tests
Preparation Techniques
Combating Test Anxiety
What the Effort Is Worth
30 Grading: Tests, Assignments, and Course Performance

The Meaning of Grades
Summative Assessments and Grading Systems
Formative Assessments and Feedback Guidelines
Accuracy, Consistency, and Learning Value
Grading Constructed Responses and Papers
Grading Lab Reports
General Cautions for Grading Constructed Responses and Papers
Returning Students’ Work
The Real Meaning and Limits of Grades

31 Evaluating and Documenting Teaching Effectiveness

Peer, Administrative, and Self-Evaluations
Student Evaluations: How Reliable?
Student Evaluations: How Valid?
Improving Your Student Ratings
Documenting Your Effectiveness
Comprehensive Approaches to Faculty Evaluation

References

Index