

# Addictive Disorders Counseling

## Degrees, Certificates and Awards

Associate in Arts: Addictive Disorders Counseling

Certificate of Achievement:  
Addictive Disorders Counseling

Certificate of Achievement: Post-Professional  
Practice in Addictive Disorders Counseling

Skills Competency Award: Advanced Studies in  
Addictive Disorders Counseling

## Program Description

The Addictive Disorders Counseling Program is designed to prepare students to work in the field of addictions counseling. Both a Certificate of Achievement and Associate Degree are available. The program provides students with the education and training to develop paraprofessional expertise and to qualify for employment as entry-level addictions counselors. A required fieldwork component offers students invaluable hands-on experience working at a facility dedicated to the treatment of alcohol and drug addiction.

Licensed clinicians seeking expertise in addictions can complete the new non-fieldwork based Certificate of Achievement: Post-Professional Practice in Addictive Disorders Counseling.

## Program Student Learning Outcomes

1. Implement a systematic approach to screening and assessment of individuals thought to have a substance use disorder and who are being considered for addiction-related services in a crisis situation.
2. Use a collaborative process in which professionals and the client develop a written document that identifies important treatment goals within measurable, time-sensitive action steps toward achieving those goals with expected outcomes.
3. Employ the administrative, clinical and evaluative activities that bring the client, treatment services and other resources together to focus on the issues and needs identified in the treatment plan.
4. Facilitate the client's progress toward mutually determined treatment goals and objectives, including counseling methods that are sensitive to individual client needs and to the influence of

significant others, as well as the client's cultural and social norms.

5. Present clients, families, significant others and community groups with information on risks related to psychoactive substance use, as well as available prevention, treatment and recovery resources.
6. Record the screening and intake process, assessment, treatment plan, clinical reports and progress notes, discharge summaries and other client-related data.
7. Adhere to the obligations of an addiction counselor within accepted ethical and behavioral standards of conduct and professional development.

## Department Offices

*Division:* Health/Human Services

Alan Price, *Dean* (A-218, ext. 3044)

## Faculty and Offices

Gordon Coburn, *Chair* (ECOC-3, #5, ext. 3021)

## Requirements for AA Degree: Addictive Disorders Counseling

The Associate Degree will be awarded upon completion of both department *and* college requirements.

## Department Requirements (38-39 units)

ADC 120*+ — Alcohol and Other Drugs: History, Dynamics and Models .....	3
ADC 121*+ — Basic Interviewing and Counseling Skills .....	3
ADC 122* — Pharmacological and Physiological Effects of Alcohol and Other Drugs .....	3
ADC 123*+ — Group Treatment.....	3
ADC 124* — Chemical Dependency and the Family .....	3
ADC 125* — Co-Occurring Disorders I: Recognition and Referral.....	3
ADC 126* — Treatment and Case Management of the Chemical-Dependent Individual.....	4
ADC 152 — Clinical Process.....	3
ADC 290 — Work Experience in ADC.....	4
PSY 100 — General Psychology <i>or</i> .....	3
PSY 100H — General Psychology, Honors.....	4

\* Acceptable substitutions are as follows: ADC 100 will substitute for ADC 120; ADC 101 will substitute for ADC 121; ADC 102 will substitute for ADC 122; ADC 107 will substitute for ADC 123; ADC 108 will substitute for ADC 124; ADC 112 will substitute for ADC 125; and ADC 105 and 106 or ADC 106 and 116 will substitute for ADC 126.

+ADC 120 and 121 should be taken before other ADC counseling courses (i.e., ADC 123, 124, 126).

*Required Alcohol and Drug Counseling Elective Course: Choose any one of the following combinations of courses for a total of 3 units:*

ADC 111 — Substance Abuse and Society .....	2
ADC 117 — Motivational Interviewing .....	1
ADC 118 — Relationships in Recovery .....	1
ADC 119 — Finding Your Authentic Voice .....	1
ADC 127 — Complementary Treatment: Auricular Acupuncture, Nutrition and Amino Acid Therapy .....	1
ADC 128 — Introduction to the Twelve Steps of Alcoholics Anonymous.....	1
ADC 129 — Emotional Balance and Mindfulness in Recovery .....	3
ADC 130# — Diversity and Cultural Issues in Counseling: Id, Experience and Addiction .....	3
ADC 131# — Attitudes, Motivation and Behavior Change ...	3
ADC 132# — Substance Abuse and Adolescents .....	3
ADC 133# — Anger Management and Family Violence.....	3
ADC 134# — Co-Occurring Disorders II: Management and Treatment .....	3
ADC 136 — Eating Disorders I.....	1
ADC 137 — Conflict Resolution .....	1
ADC 138 — Multiple Sexual Addictions.....	1
ADC 139 — Introduction to Process Addictions .....	3
ADC 140 — Recovery through Movement .....	2
ADC 141 — Integral Treatment Modalities.....	1

#Acceptable substitutions are as follows: ADC 103 will substitute for ADC 130; ADC 109 will substitute for ADC 131; ADC 110 will substitute for ADC 132; ADC 113 or ADC 114 will substitute for ADC 133; and ADC 115 will substitute for ADC 134.

*Required Behavioral Science elective: Choose any one of the following courses:*

PSY 130 — Personality Dynamics and Effective Behavior ..	3
PSY 170 — Abnormal Psychology .....	3
SOC 101 — Introduction to Sociology <i>or</i> .....	3
SOC 101H — Introduction to Sociology, Honors.....	4
SOC 103 — Marriage, Family and Intimacy .....	3
SOC 104 — Social Psychology .....	3

### College Requirements

For complete information, see “Graduation Requirements” in the *Catalog* Index.

### Requirements for Certificate of Achievement: Addictive Disorders Counseling

#### Department Requirements (38-40 units)

ADC 120*+ — Alcohol and Other Drugs: Hist, Dynamics and Models .....	3
ADC 121*+ — Basic Interviewing and Counseling Skills .....	3
ADC 122* — Pharmacological and Physiological Effects of Alcohol and Other Drugs .....	3
ADC 123*+ — Group Treatment.....	3
ADC 124* — Chemical Dependency and the Family .....	3
ADC 125* — Co-Occurring Disorders I: Recognition and Referral.....	3
ADC 126* — Treatment and Case Management of the Chem-Dependent Individual .....	4
ADC 152 — Clinical Process.....	3
ADC 290 — Work Experience in ADC.....	4
PSY 100 — General Psychology <i>or</i> .....	3
PSY 100H — General Psychology, Honors.....	4

\* Acceptable substitutions are as follows: ADC 100 will substitute for ADC 120; ADC 101 will substitute for ADC 121; ADC 102 will substitute for ADC 122; ADC 107 will substitute for ADC 123; ADC 108 will substitute for ADC 124; ADC 112 will substitute for ADC 125; and ADC 105 and 106 OR ADC 106 and 116 will substitute for ADC 126.

+ADC 120 and 121 should be taken before other ADC counseling courses (i.e., ADC 123, 124, 126).

*Required Addictive Disorders Counseling Elective Course: Choose any one of the following combination of courses for a total of 3 units:*

ADC 111 — Substance Abuse and Society .....	2
ADC 117 — Motivational Interviewing .....	1
ADC 118 — Relationships in Recovery .....	1
ADC 119 — Finding Your Authentic Voice .....	1
ADC 127 — Complementary Treatment: Auricular Acupuncture, Nutrition and Amino Acid Therapy .....	1
ADC 128 — Introduction to the Twelve Steps of Alcoholics Anonymous.....	1
ADC 129 — Emotional Balance and Mindfulness in Recovery .....	3
ADC 130# — Diversity and Cultural Issues in Counseling: Identity, Expression and Addiction .....	3
ADC 131# — Attitudes, Motivation and Behavior Change ...	3
ADC 132# — Substance Abuse and Adolescents .....	3
ADC 133# — Anger Management and Family Violence.....	3
ADC 134# — Co-Occurring Disorders II: Mgmt and Treatment .....	3
ADC 136 — Eating Disorders I.....	1
ADC 137 — Conflict Resolution .....	1
ADC 138 — Multiple Sexual Addictions.....	1
ADC 139 — Introduction to Process Addictions .....	3
ADC 140 — Recovery through Movement .....	2
ADC 141 — Integral Treatment Modalities.....	1

#Acceptable substitutions are as follows: ADC 103 will substitute for ADC 130; ADC 109 will substitute for ADC 131; ADC 110 will substitute for ADC 132; ADC 113 or ADC 114 will substitute for ADC 133; and ADC 115 will substitute for ADC 134.

*Required Behavioral Science elective: Choose any one of the following courses:*

PSY 130 — Personality Dynamics and Effective Behavior ..	3
PSY 170 — Abnormal Psychology .....	3
SOC 101 — Introduction to Sociology <b>or</b> .....	3
SOC 101H — Introduction to Sociology, Honors.....	3-4
SOC 103 — Marriage, Family and Intimacy .....	3
SOC 104 — Social Psychology .....	3

**Requirements for Certificate of Achievement:  
Post-Professional Practice in Addictive  
Disorders Counseling**

**Department Requirements (16 units)**

ADC 120* — Alcohol and Other Drugs: History, Dynamics and Models .....	3
ADC 122* — Pharmacological and Physiological Effects of Alcohol and Other Drugs .....	3
ADC 124* — Chemical Dependency and the Family .....	3
ADC 125* — Co-Occurring Disorders I: Recognition and Referral.....	3
ADC 126* — Treatment and Case Management of the Chemical-Dependent Individuals.....	4

\* Acceptable substitutions are as follows: ADC 100 will substitute for 120; 102 will substitute for 122; 108 will substitute for ADC 124; 112 will substitute for 125; and 105 and 106 or 106 and 116 will substitute for 126.

Students must complete the above courses with a grade of “C” or higher or pass in all courses.

**Requirements for Skills Competency Award:  
Advanced Studies in Addictive Disorders  
Counseling**

**Department Requirements (17 units)**

ADC 111 — Substance Abuse and Society .....	2
ADC 130# — Diversity and Cultural Issues in Counseling: Identity, Expression and Addiction .....	3
ADC 131# — Attitudes, Motivation and Behavior Change ...	3
ADC 132# — Substance Abuse and Adolescents .....	3
ADC 134# — Co-Occurring Disorders II: Management and Treatment .....	3
ADC 139 — Introduction to Process Addictions .....	3

#Acceptable substitutions are as follows: ADC 103 will substitute for ADC 130; ADC 109 will substitute for ADC 131; ADC 110 will substitute for ADC 132; and ADC 115 will substitute for ADC 134.

Students must complete the above courses with a grade of “C” or higher or pass in all courses.

**Planning a Program of Study**

Students are encouraged to work with an SBCC counselor in planning a sequence of courses and learning about General Education requirements.

Adjunct faculty teaching in the Addictive Disorders Counseling Program are excellent resources for exploring career options in this field. The college's Career Center can also provide information about this type of work.

### **Program Cost and Outcome**

For planning purposes, webpages below provide information on the cost of attendance, program length (assuming a student attends full-time), financing options and historical student completion rates:

#### *Addictive Disorders Counseling*

[www.sbcc.edu/financialaid/gainfulemployment/Alcohol%20and%20Drug%20Counseling.htm](http://www.sbcc.edu/financialaid/gainfulemployment/Alcohol%20and%20Drug%20Counseling.htm)

#### *Post-Professional Practice in Addictive Disorders Counseling*

[www.sbcc.edu/financialaid/gainfulemployment/Post-Professional%20Practice%20in%20Alcohol%20and%20Drug%20Counseling.htm](http://www.sbcc.edu/financialaid/gainfulemployment/Post-Professional%20Practice%20in%20Alcohol%20and%20Drug%20Counseling.htm)

## **Addictive Disorders Counseling Courses**

### **ADC 111 — Substance Abuse and Society (2) — CSU, UC**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 36 lecture*

Study of the impact of drugs and alcohol on American society and responses to it from the government's efforts to reduce illegal trafficking and crime, and to the efforts of communities to promote education, prevention, treatment and rehabilitation. Topics include the cost of substance abuse; failure of the war on drugs; current trends in drug diversion/treatment-based specialty courts; the efficacy of different treatment modalities; and the effects of substance abuse on minorities, seniors and women.

### **ADC 117 — Motivational Interviewing (1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 18 lecture*

Explores motivation-enhancing techniques in working with clients' natural ambivalence to change addictive behaviors and making changes to increase participation in recovery and positive treatment outcomes.

### **ADC 118 — Relationships in Recovery**

#### **(1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 18 lecture*

Examines the social associations, connections or affiliations between two or more people in the recovery process from chemical dependency. Topics include personal relationships, intimate relationships and professional relationships.

### **ADC 119 — Finding Your Authentic Voice**

#### **(1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 18 lecture*

Orients counselors to the paradoxical treatment found in 12-step programs, emphasizing the necessity to develop awareness of personal process and authentic self through supported risk-taking. Singing to an audience begins the transformation of self-consciousness to full authentic presence.

### **ADC 120 — Alcohol and Other Drugs: History, Dynamics and Models**

#### **(3) — CSU, UC**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Study of psychoactive substance use, abuse and dependence from social, historical and current perspectives, including biological, psychological and socio-cultural models of addiction and dependence. Explores the impact of alcohol and drugs on American society and the dynamics of chemical dependency. Other topics include the cost of substance abuse, different treatment modalities and philosophies, and the effects of substance abuse on minorities, seniors and women.

### **ADC 121 — Basic Interviewing and Counseling Skills (3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Counseling as a collaborative process that facilitates the client's progress towards mutually determined goals and objectives. Presents skills fundamental to effective interviewing and counseling, including how to deal constructively with clients whose behavior is unpleasant or difficult. Students learn dynamics of behavior and relationships, and develop a conceptual model for observing and assessing patterns of personal interactions. Skills learned may be applied in counseling, mediation, negotiation and interpersonal settings.

**ADC 122 — Pharmacological and Physiological Effects of Alcohol and Other Drugs**

**(3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*

*Hours: 54 lecture*

Survey of the medical and pharmacological aspects of alcohol and psychoactive substances. Includes theories and research pertaining to chemical dependency, pharmacological actions of drugs, drug classifications, medical and physical effects of alcohol and other drugs, the potential for abuse and dependency, and how psychoactive substances affect the mind and body.

**ADC 123 — Group Treatment**

**(3) — CSU**

*Corequisites: Prior or concurrent enrollment in ADC 121*

*Skills Advisories: Eligibility for ENG 110 or 110H*

*Hours: 54 lecture*

Examines the theory and practice of group therapy as a primary modality in the treatment of substance abuse/dependency and explores group structures and compositions that work best for different populations in successive stages of recovery, stages of group process, and effective group leader skills.

**ADC 124 — Chemical Dependency and the Family**

**(3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*

*Course Advisories: ADC 120 and 121*

*Hours: 54 lecture*

Presents theory and clinical practice designed to provide a basic understanding of the family dynamics involved when a member has a chemical dependency problem. Therapeutic techniques to facilitate effective intervention strategies for the family as a system and individuals within that system.

**ADC 125 — Co-Occurring Disorders I: Recognition and Referral**

**(3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*

*Course Advisories: ADC 120 and 121*

*Hours: 54 lecture*

Explores historical and current theories dealing with clients who have both a substance abuse and co-existing psychiatric disorder. Includes concepts, definitions, epidemiology, historical divisions of the fields of substance abuse and psychiatry, funding, clinical implications, recognition, and assessment and referral of clients.

**ADC 126 — Treatment and Case Management of the Chemically-Dependent Individual**

**(4) — CSU**

*Prerequisites: ADC 121*

*Skills Advisories: Eligibility for ENG 110 or 110H*

*Hours: 72 lecture*

Theories, skills, techniques and legal/ethical practices fundamental to bio-psycho-social therapy for chemically-dependent individuals. Includes eliciting an appropriate case history; assessment and diagnosis; implementing effective intervention; case management skills; treatment plan development; and a review of legal and ethical issues governing the alcohol and drug counselor's responsibilities.

**ADC 127 — Complementary Treatment: Auricular Acupuncture, Nutrition and Amino Acid Therapy**

**(1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*

*Hours: 18 lecture*

Introduces modalities of complementary medicine for addictive disorders, including auricular acupuncture, oriental medicine, nutrition and amino acid therapy and their applications as effective treatment, exploring their efficacy and how they integrate with other treatment modalities.

**ADC 128 — Introduction to the Twelve Steps of Alcoholics Anonymous**

**(1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*

*Hours: 18 lecture*

Introduces the twelve steps of Alcoholics Anonymous as a basis for treatment of and a model for recovery from chronic addictive disorders. Topics include a history of the development and efficacy of the twelve steps.

**ADC 129 — Emotional Balance and Mindfulness in Recovery**

**(3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*

*Hours: 48 lecture*

Introduces bio-psychological approaches to treatment of trauma and addiction, engaging dynamics between the brain and the mind. Presents research demonstrating the efficacy of meditation, mindfulness, Emotional Freedom Technique (EFT), neurofeedback, and physical/emotional lifestyle choices as transformative practices which lead to increased and lasting emotional balance.

**ADC 130 — Diversity and Cultural Issues in Counseling: Identity, Expression and Addiction (3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Examines the importance of diversity and culture in determining an individual's reality as applied to the prevention and treatment of alcohol and other drug abuse or dependence. Explores both dependence and codependence from different cultural perspectives, with emphasis on increasing the student's awareness of the social and economic factors that influence substance abuse among U.S. ethnic populations.

**ADC 131 — Attitudes, Motivation and Behavior Change (3) — CSU**

*Prerequisites: ADC 120 and 121*  
*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Explores and contrasts models of motivation and behavior change in substance-abusing clients. Students examine and practice motivational-enhancing techniques, with emphasis on learning therapeutic skills to create conditions which facilitate an individual's motivation to change, enlisting the cooperation in developing a plan of change, and helping the client to maintain a positive attitude.

**ADC 132 — Substance Abuse and Adolescents (3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Course Advisories: ADC 120 and 124*  
*Hours: 54 lecture*

Focuses on the treatment needs and challenges of substance-abusing adolescents. Includes screening and assessment; developing effective prevention and treatment approaches; levels and types of care; case management; detoxification; individual, group and family therapy; peer-driven treatment; treatment in the juvenile justice system; and why adolescent treatment has been so unsuccessful.

**ADC 133 — Anger Management and Family Violence (3) — CSU**

*Prerequisites: ADC 120*  
*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Examines anger, aggression and violence, particularly domestic violence, and their connection to substance

abuse. Explores screening for domestic violence and the creation of effective treatment plans and cognitive and behavioral interventions; and coordination of services between substance abuse and domestic violence treatment providers.

**ADC 134 — Co-Occurring Disorders II: Management and Treatment (3) — CSU**

*Prerequisites: ADC 125*  
*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Introduces management and treatment of persons with co-existing psychiatric and substance abuse disorders within chemical dependency treatment modalities. Building on topics covered in ADC 125, study focuses on common issues facing alcohol and drug counselors who manage cases of persons diagnosed as having a psychiatric disorder in addition to a chemical dependency. Includes pain management, utilizing 12-step programs, conflicts with such programs, working with families, integration of treatment, and treatment modalities.

**ADC 136 — Eating Disorders I (1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 18 lecture*

Examines the nature and dynamics of major eating disorders, including diagnostic criteria, physical and behavioral symptoms, risk factors, adaptive functions and appropriate referrals for treatment.

**ADC 137 — Conflict Resolution (1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 18 lecture*

Explores conflict resolution and the necessary skills to deal with situations and individuals in conflict. Presenting effective methods to resolve conflicts and disputes.

**ADC 138 — Multiple Sexual Addictions (1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 18 lecture*

Reviews the psychological and physiological aspects of addictive sexual attitudes and behaviors, the rapid expansion of pornography, the range of sexual activities available on the Internet, and the potential adverse consequences for users and their

partners. Explores how addictions, compulsions and deprivations combine in a complex systemic problem called Addiction Interaction Disorder (AID).

### **ADC 139 — Introduction to Process Addictions (3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Presents the psychological and physiological aspects of process addictions within a meta-pattern model called Addiction Interaction Disorder (AID). Explores how addictions, compulsions and deprivations combine, interact and become part of one another and how these packages can be unbundled and approached separately or in whole.

### **ADC 140 — Recovery through Movement (2) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 36 lecture*

Explores how daily physical practice can build conscious awareness and transform negative self-perception patterns and interpretations resulting from addictive conditioned tendencies through the use of building an awareness of how the body and the mind are connected, developing an awareness of how the body takes on the shape of our experience.

### **ADC 141 — Integral Treatment Modalities (1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 18 lecture*

Introduces emerging cognitive/neurological approaches to the treatment of addictive behaviors, examining the dynamic interplay between the physiology of the brain and the structures of the psyche, as affected by trauma and addiction.

### **ADC 145 — Prenatal Effects of Drugs and Alcohol (1) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 18 lecture*

Provides the skills to identify prenatal effects of drugs and alcohol; to intervene with pregnant women who may be abusing substances; to implement strategies and interventions to help affected individuals and their families; and to provide this vital information to those at high risk who may become pregnant.

### **ADC 146 — Substance Abuse Prevention (3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Course Advisories: ADC 120 and 121*  
*Hours: 54 lecture*

Provides training from evidence-based prevention initiatives and practices; the application, effective planning and evaluation of those practices from research that validates the advantages of prevention and the creation of new opportunities for expansion in the field of substance abuse.

### **ADC 147 — Tobacco Addiction and Treatment (3) — CSU**

*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Explores the nature and severity of tobacco addiction and effective interventions and strategies to promote using cessation, personal awareness and wellness, modeling these strategies. Topics include, but are not limited to, managing symptoms of stress, diet, physical movement, goal setting, habit change, resistance and fear of change regarding cessation.

### **ADC 152 — Clinical Process (3) — CSU**

*Prerequisites: ADC 126*  
*Corequisites: ADC 290*  
*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 54 lecture*

Through the use of case presentations, clinical process and supervision, this course further develops and integrates specific skills and competencies central to the entry-level alcohol and drug counselor's professional and clinical efficacy.

### **ADC 290 — Work Experience in Addictive Disorders Counseling (1-4) — CSU**

*Prerequisites: ADC 126*  
*Skills Advisories: Eligibility for ENG 110 or 110H*  
*Hours: 60-300 lab*

Provides certificate and degree students in Addictive Disorders Counseling with fieldwork at an agency that offers counseling and/or case management services to individuals and families with alcohol or other drug problems. Experiential learning consists of 220 hours of supervised fieldwork over a 16-week semester.